

Marg. P. Seyour
THE
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EDWARD SEARCH, Esq;

VOLUME II. PART II.
T H E O L O G Y.

Τὸ γνωστὸν τῷ Θεῷ φανερόν ἐστιν ἐν αὐτοῖς· ὁ γὰρ
Θεὸς αὐτοῖς ἐφανερώσε. Τὰ γὰρ ἀόρατα αὐτῷ
ἀπὸ κτίσεως κόσμου, τοῖς ποιήμασι νοούμενα κα-
θοραῖται, ἥτε αἰδίδῃ αὐτῷ δυνάμει καὶ δειότης.

Rom. Ch. i. 19, 20.

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MDCCLXVIII.

LIST OF OF NATURAL HISTORY



EDWARD BEECHER, Esq.

VOLUME II. PART II. ZOOLOGY.

To the Hon. the Secy. of the Admiralty, &c. &c.
 The Hon. the Secy. of the Admiralty, &c. &c.
 The Hon. the Secy. of the Admiralty, &c. &c.
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MDCCLXXXIII.

T H E
L I G H T O F N A T U R E
P U R S U E D.

V O L. II. P A R T II.

C H A P. XX.

H Y P O T H E S E S.

NEVERTHELESS the heart of man finds a little scope for contemplation without a prospect of something it can conceive; for imagination wants a ground more solid than meer abstraction to walk upon. Though complacence be the only thing valuable to the mind we can never obtain it without some other perception to usher it in, nor can we be pleased without some agreeable sight or sound or taste or event or reflection to please us, and when we go to frame the idea of pleasure we find ourselves unable to do it unless by recalling another idea of those things

that used to introduce it. Therefore as men turn their thoughts upon another state they find ideas rise bearing a similitude to what they have known in the present, and moralists comply with the bent of human nature in this respect leading imagination in such tracts as she is capable of pursuing; for finding naked happiness too thin for the mind to lay hold of, they represent it under such veils as may render it discernible. Hence arises the so common use of figure, allegory, fable and parable which shadow forth things unknown by allusion to things well known and familiar and are not intended as an exact description of what shall happen but only to give an idea of the joys that shall be received by comparing them with those we should receive in the circumstances represented. Therefore when we are told of sitting in white robes with palms in our hands near the throne of glory, this is not to be understood literally, but only to signify that the pleasure to be expected will not fall short of that a common man would feel if honoured with such array and such a situation. Therefore those are to blame who draw conclusions concerning the manner of existence in other forms of Being from the expressions used in parables; and those who employ figures ought to be very carefull in choosing them so as may not hurt

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the imagination by leading into gross ideas that will have a bad influence upon the conduct.

2. But figure and parable being employed occasionally and often varied as occasion requires, men of thought and contemplation, desirous of forming their ideas into a regular plan which may serve them upon all occasions, invent hypotheses comprizing in one system all that they can imagine concerning things unknown. So that Hypothesis is a kind of continued allegory, connected in all its parts, calculated to answer all the purposes intended by it and formed upon one uniform design. It differs from Fable and Parable in this respect, that fable represents an action impossible to have been performed, parable one that is possible and similar to those frequently happening but not proposed to our belief as an historical fact, whereas hypothesis exhibits such a representation of things as may be the real case for anything that can be shown to the contrary. It requires no positive evidence to build it upon, the framer being always looked upon as a defendant and the burthen of proof lying upon him that would overthrow it: but its strength lies in the consistency and mutual dependence of its several branches upon one another, its not contradicting any known

phenomena or received principles, its helping to join into a regular body those which before were detached and independent, and is thought to receive great confirmation if it can be made appear an improvement or explanation of former hypotheses embraced by men of judgement and reputation. Your hypothesis-makers are commonly so fond of their schemes as to take them for demonstrations and try the truth of every thing else by its conformity therewith : but this is an abuse, for hypothesis requiring no certain proof nor anything more than plausibility, cannot justly be offered to prove anything certainly ; nevertheless I think it may be brought in support of truths for which we have a solid foundation elsewhere to make them more clearly apprehended and more readily received. For as the law admits of parol evidence in favour of an heir or an executor but not against them, so the tissues of imagination may be employed to adorn and illustrate what solid reason has established, but not to cover it over nor as a foundation to support any superstructures of itself : they may rather be looked upon as engines of rhetoric to familiarize and persuade than as weapons of logic to overthrow and convince ; yet in this capacity may perform excellent service

vice by turning the conviction of important truths into an habitual persuasion.

3. Nor should there be caution wanting against throwing in too many particulars, for the more of them there are to maintain the more difficult it will be to ward off the attacks of an adversary, and if he can undermine any of them it will bring a disrepute upon the whole. The general laws of nature affecting all her inhabitants can be supposed but few, nor can there be any instances of resemblance imagined between the visible world and the invisible. For most of our employments and ideas must be peculiar to ourselves, as springing from the constitution of our present frame composed of complicated organs affected by our animal circulation and a gross body subject to many wants requiring materials and long preparations to supply them. The vibrations of air are not likely to affect us with sounds, nor the rays of light with colours, nor flavours, odours or tangible objects to operate upon us in the same manner they do now. The cares we take for cloathing our backs, the provisions we daily make for our stomachs will be no longer needfull. Honours, preferments, estates, trades, professions, that now take up the time and thought of men will cease: nor will there be room for the arts and sciences

which find their encouragement in the uses and conveniences they procure for life: neither can we converse together in the manner we do now after having lost the organs of speech. And when we consider how much our organs of reflection are affected by the state of our bodies, how much our knowledge depends upon the traces remaining fresh in our memory, we cannot expect to carry our mental acquisitions with us nor to think and reason in the manner we do at present. Therefore we can hope at most to frame but an imperfect and partial account of matters wholly unknown to us, and if we can do this so far as to give a general idea that there may be methods of employment and objects productive of happiness, it will suffice for the purpose intended.

4. Nevertheless it can scarce be doubted there are some general laws running throughout the creation, which to distinguish from the municipal prevailing only in the regions we inhabit seems the proper province of philosophy. We receive all our perceptions here from the action of body, they varying as that is variously modified: the like source then may be presumed to supply us with perceptions in another state, perhaps by modifications very different exciting in us sensations and reflections whereof we have

no knowledge now. The pleasures of life for the most part lie in exercises of our activity, nor is there cause to deny this a general law which will never leave us destitute of employment in providing for our benefit and avoiding our hurt howmuchsoever the goods and evils and measures respecting them shall then be dissimilar from those which engage our attention at present. We have a curious contexture of organs serving as a medium or channel of conveyance for the impulse of external objects which cannot come near enough to operate upon us directly, and though we know this will be dissolved what should hinder but that another may be provided for us which shall perform the same office more perfectly without that long transmission of objects from one vessel to another whereby their appearance may be altered and we made to discern them otherwise than they are. We have risen here from the meer vegetative condition of a foetus to the helpless simplicity of an infant, and afterwards by many gradations to the maturity of manhood; from whence many judicious persons have augurated that we are in the ascending part of our orbit, expectant of further improvement in the next stage assigned us: not by advancing onward in the progress we have already begun,

gun, for our present knowledge and habits scarce seem likely to prove of future use to us, but by being endowed with quicker parts and higher faculties capable of making larger acquisitions than any known among the sons of men. Thus by observing what circumstances of our present situation are not necessarily confined thereto we may rise from them in framing a system, which may be such as shall receive a good countenance from them tho' perhaps not an infallible proof.

5. Since the method of hypothesis has been fallen into more or less by most who have attempted to treat of the unknown state, and since there is a good use to be made of it, why should I be debarred the liberty of trying my hand as well as another? But I shall use my liberty sparingly observing the rules and cautions before laid down, regarding use rather than curiosity, and forbearing to launch into minute particulars which may be either unwarranted or inexpedient. For imagination may be lawfully employed in the services of reason, but ought to be restrained from all fallies which those services do not require. I have endeavoured all along to draw my reasonings from observation and experience in as close a deduction as I was able, and intend adhering

hering to the like method for the future : therefore if I should be caught hereafter at proving any thing from hypothesis it must be looked upon as an inadvertency, for I expect no more therefrom than to render those truths more intelligible that have their foundation elsewhere. We have already seen reason to conclude from the contemplation of that Power which governs both worlds that they stand connected in interest with one another, and that what befalls us in this will affect our condition in the next ; and I propose no more now than to draw a slight sketch which may make us more sensible how this may be effected : for a general idea of mutual dependence weighs but little upon the mind unless we can imagine some particular ties whereof it consists ; and as physicians mingle their subtiler medicines with more solid ingredients that they may not be lost in the mouth, so our abstracted ideas must be cloathed with others more sensible to make them sink down into the imagination.

C H A P. XXI.

VEHICULAR STATE.

WHEN death puts an end to the animal circulation we see the body remains a meer lump of sluggish matter showing no signs either of perception or activity, from whence we naturally conclude that the spirit is departed from her: but whether or no it carries any thing away with it we are wholly uncertain, we see nothing fly off upon the last groan, but our senses are not acute enough to assure us that nothing does fly off. Therefore by virtue of the privilege constantly claimed in making an hypothesis I may fairly assume, what nobody can disprove, that the spirit upon quitting her present mansion does not go out naked nor entirely disengaged from matter, but carries away with her an integument from among those wherewith she was before invested. And I am far from being singular in this notion, for many wiser men have assigned a fine vehicle for the habitation of the spirit after its being divested of flesh and blood; and the ancients generally painted the soul or Psyche with butterflies wings, to

represent that she came out with a new body as a butterfly does from the Chrysalis : nor do I want the best established authority in my support, for the apostle Paul compares the body to a seed which rots and perishes in the ground, nevertheless a germ survives producing another plant bearing some resemblance to that which generated the seed.

2. But we must suppose this vehicle extremely small so that the nicest eye may not discern it when going, nor the finest scales discover an abatement of weight in what remains after it is gone : yet it must contain an organization capable of exhibiting a greater variety of ideas than we now experience. No doubt it will appear strange and extravagant to the generality to imagine that so many organs of sensation and reflection and instruments of action as a man possesses in his present condition can ever be contained in a body so small as to be undiscoverable by the finest balance or the most piercing eye ; for so must every thing appear that differs widely, whether in size or composition, from the objects we have been constantly conversant with. The young fellow who has never been in a nursery since he has left his own, the first time he sees a new born babe he is apt to wonder at its littleness : and if he dips into a treatise on the formation of

a foetus, can scarce believe the lineaments of a human body could be comprized within so narrow a compass as he sees there described. Thus every further reduction of size gives a fresh shock to his imagination until familiarized thereto by frequent contemplation; for things are no longer strange than while new to the thought. For which reason I was willing to prepare for my present subject in the third chapter of this volume where I have endeavoured to put the reader upon reflecting on the great divisibility of matter, and to show that the least conceivable particle is capable of containing as great a variety of parts and machinery as the whole human body. But what clogs our comprehension in these minute divisions is that we commonly think of making them by dividing the whole without dividing the parts, which must certainly spoil the composition. If St. Paul's church were cut in halves, each half would not be a church; if into quarters or lesser proportions they would still be more remote from the plan of the architect; but were all the stones, the timbers, the ornaments proportionably lessened, the whole form, disposition and symmetry might still remain the same though reduced to the bigness of a nut-shell. This indeed is what the clumsy hand of man could never do, but nature is
a finer

a finer artificer than man, and I doubt not might succeed if she would undertake it. So if she were to waste away one half of a man from the head downward without destroying his vital and animal functions, yet he would have but one arm and one leg and must lose many of his powers: but if she lessened all his component parts, his bones, his muscles, his fibres, the globules of his blood and other juices in equal degree, he might still continue a man, how small soever reduced, with the same variety of powers and faculties as before. He could not indeed exercise them upon the same objects he used, but she wants not means of furnishing him with other materials useless and unknown to him before but suitable to the condition she has thrown him into. And it may be presumed he would be better able to manage them, his strength not decreasing in proportion to his size, because small bodies are more compact and solid than the larger made up of them, for composition always adds to the quantity of pore in the compound. A bushel of pease has less specific gravity than the single pease it contains, because there will be hollow spaces between each pea and its neighbours besides the pores within their substances: and if a multitude of bushels be packed up in a room there will be vacancies
between

between them besides those among their contents. Therefore the finer parts a body contains, the fewer atoms they must severally consist of (for these cannot be divided), the less of pore there will be among them, and consequently its nerves and sinews will be so much tougher and stronger.

3. And as the limbs and instruments of action in such a little body will be stronger with respect to the materials they have to deal with, so likewise must they be more agile and pliant: for this we find to be the case between animals of similar make, whose motions are commonly more unwieldy in proportion to their largeness. A little horse shifts his legs quicker than a tall one; the vulture and the eagle cannot flutter their wings so fast as the sparrow; nor did you ever see a hornet crawl so nimbly along the table as a fly; and little men are generally the quickest in their motions. Imagine a race of giants as big as Hampstead hill placed on an earth which with all its animals, fruits, corn, trees and vegetables should be proportionably vast: they might then have the same accommodations as we have but could not find the same uses and convenience in them by reason of the tediousness of their motions. Consider how long they must be at dinner; if they sat down at eight in the morn-

morning they would scarce finish their repast by night, having a mile to carry every morsel from their plate to their mouths; when they went to bed it must take an hour to get up stairs, and after having unbuttoned their coat they must give their arm a swing of two or three miles round to pull down the sleeve behind; when they talked together it would require four or five seconds for their voices to reach one another's ears; and as it may be supposed their mental organs are conformable in size to their bodily, if you asked what's o'clock it might be necessary to consider half an hour before they could think of the proper answer. In short they must needs be a slow, solemn and heavy generation, without any spark of wit or liveliness belonging to them. If one of us were migrated into their enormous hulks, should we not, think ye, wish ardently to get back again into our less than six-foot bodies? and by parity of reason it may be presumed that when delivered from our present cumbersome bodies, if we remember anything of our situation therein, we shall be as much rejoiced to find ourselves in a body proportionably less and proportionably more alert and vigorous, wherein we may dispatch as much business in a minute as we can now in an hour, and perhaps be able to read through Guicciardine in the time we are

now poring over all the nothings in a four-columned newspaper. Nor do there want objections against the supposal of bodies equally large with those we possess : for besides that it may be asked, how comes it we never see them ? if they are gross bodies composed of flesh, blood and bones like ours, where shall they inhabit ? they cannot live in the fields of ether, for they must have food to support them, solid ground to walk upon, an atmosphere to breathe and to keep their veins from bursting by its pressure or to buoy them up if you should fancy them provided with wings. They cannot live under ground where no corn can grow, no pasture to feed their cattle, no light can reach them, and the air, if any, must be too dense for their respiration. In what other earths then will you dispose of them ? for they will want more than one considering the vast multitudes that have incorporated among them since Adam : what Planets are there among those we know of that will not either melt them to oyl or freeze them to statues ? or could you find a commodious habitation how would you get them thither without a miracle ? But if you suppose them hollow skins or meer surfaces, as vulgarly fancied of ghosts or apparitions, they can have no strength nor firmness in their limbs, no consistency of parts
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to prevent their being torn in pieces by winds, no solidity to keep them steady from being blown about by every breeze of air, nor power of motion being unable to overcome the resistance of whatever medium they may have to pass through. Therefore when we reflect on the endless divisibility of matter, the extreme porosity of solids, the vast spaces lying between the particles of all fluids, it seems easier to comprehend our vehicles so sized as to slip between such corpuscles as are too bulky for them to cope with rather than empty shadows or gross compositions of flesh and blood like ourselves.

4. I have hitherto spoken of the vehicles as little diminutive men with arms, legs and so forth such as we have ; but I do not think so narrowly of nature as to pronounce with Epicurus that she cannot form a reasonable creature unless in a human shape. It seems to me more agreeable to reason, at least more soothing to the imagination and better suited to our expectations of exchanging this present mansion for a more commodious, to suppose them not made in the shape nor provided with the limbs of any animal whatever, but consisting all of muscle and fibre, tough and strong but extremely flexible and obedient to the Will, susceptible of any shape and in every part capable of being cast into

any member of any animal, of being made soft as a feather or hard as a bone. We have some few imperfect samples of this changeableness in our own composition: our tongue lies round and yielding in our mouths, yet we can thrust it out to a considerable length, make it push with some force or support a small weight hung upon it by a string. If a man not very fat sits resting his leg carelessly upon a stool his calf will hang flabby like the handkerchief in your pocket, let him stand upright with a burthen upon his shoulders as much as he can well bear and you will find his calves hardened into very bones. We can open our hands into five movable fingers for any nice or nimble work, or we can close them into a kind of hammer for striking, or bend them in rigid hooks for pulling. We have but one windpipe to sing, to talk, to whine, to rant, to scold with, nevertheless we can cast this single instrument into as many various forms as there are voices and tones of voice we utter: whereas were it necessary to have a different pipe for every articulate sound our throats must have been made bigger than a chamber organ. Thus we see how great advantage and convenience must accrue upon the members being convertible to many uses: and at the same time this may lessen our amazement at the multitude of powers we suppose

suppose comprized within so narrow a compass, for there may be more powers of action without requiring more works than we have in our present machinery; especially if the works be simpler, not consisting of a multitude of parts whose operation must be propagated from one to another and all concur to perform every single action, whereby the variety of our motions must needs be greatly contracted. You may have a bell-handle hanging by your chimney side with which by means of strings and pulleys you may ring a bell at tother end of the house: but you can only jerk it towards you, and cannot give it so many shakes up and down, to and fro, quick and gentle, as if you held the bell itself in your hand. In like manner we act upon external bodies with gross members lying at an immense distance from the seat of our activity, requiring a long contrivance of strings and pulleys to give us any command of them; we move our limbs by our bones, the bones by tendons, the tendons by muscles, the muscles by nerves, and the nerves perhaps by a series of imperceptible fibres which no anatomy can investigate: whereas were the externals needfull for our uses so sized as that we could apply our first fibres immediately to them, we might manage

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them

them a hundred times more handily, expeditiously and cleverly.

5. And the same advantage accruing from the great flexibility of fibres to cast themselves into the form of any limb occasionally as shall be wanted may be extended likewise to the organs of sensation, which are only so many textures of network variously woven from similar threads. The retina of the eye, whereon all our visible objects are painted, takes its name from a net; the auditory nerves are represented to us by anatomists as expanded in a reticular form at the bottom of the ear; the like is told us of the olfactory nerves spread over the lamellæ composing the ossa spongiosa of the nose; of the gustatory papillæ of the tongue, and tactile papillæ of the fingers and all the rest of our body. Now if we had the power of changing the position of our threads, what should hinder but that we might cast them into any texture fitted to receive the vibrations exciting any sensation we pleased; so as to see or hear or smell or taste or feel with the same organ according to the qualities of external objects striking upon it? Here I must beg indulgence from modern delicacy to allow me a childish experiment for explaining my idea: boys almost fit for school have an ingenious play they call cat's cradle; one ties the two ends

ends of a packthread together and then winds it about his fingers, another with both hands takes it off perhaps in the shape of a gridiron, the first takes it from him again in another form, and so on alternately changing the packthread into a multitude of figures whose names I forget it being so many years since I played at it myself. If then we should be enabled to erect the interior fibres of our little body like so many fingers we might take off the exterior therewith, still shifting them from one set of fingers to another, sometimes in retina's, sometimes in auditory or olfactory expansions, or perhaps others capable of conveying new sensations whereof now we have no conception. Nor let it be objected that the retina cannot perform its office without an eye-ball consisting of cornea, uva, the three humours aqueous, chry-stalline and vitreous before it; nor the auditory nerve without an ear containing a meatus auditorius, a tympanum with its malleus, a cochlea and fenestra ovalis with its stapes: for these are only wonderfull contrivances to gather the rays of light into pencils or modulate the vibrations of air that they may be compact and vigorous enough to affect our gross and dull organs, but the finer vehicular fibres may be so agile and sensible as to take an impulse from single corpuscles of what-

ever shall serve them instead of lights and sounds without needing a long process of refracting media or winding ducts to marshal numbers of them in a proper order for their reception.

6. Such little bodies likewise must be directly under the action of the mind in more of their parts without needing the complicated machinery of strings or engines to propagate it to them: for the minds immediate activity reaches no further than the sphere of her presence, which can never be enlarged, therefore the smaller body she inhabits the greater proportion of it will fall within her presence and subject to her command. But the sphere of presence must be extremely minute because the bodies capable of containing it are found to be so, for nobody will doubt that every spirit vitally united to a corporeal organization is wholly surrounded and covered thereby. The great Boerhave assures us that the human foetus was once no bigger than an ant, that the doctrine of animalcules is generally received among the moderns, that he has seen them himself, that his friend Leuwenhoek has demonstrated them to be ten thousand times, and believes them ten million times less than a grain of sand. Who then can doubt that this ant and this animalcule were our very selves, or that that living principle

principle appearing to actuate the animalcule with great vigour and sprightliness is the same perceptive individual which afterwards acts and feels and understands in the full grown man? If we would seek for the place where this individual resides in our human composition there seems no likelier method to find it than by tracing the channels of conveyance through which sensation is transmitted from external objects to our notice, for they, one would think, must all conduct to some one spot, which is the royal presence chamber where their messages are ultimately delivered: but no investigations by dissections, by microscopes and by ceraceous injections have yet been able to discover this chamber, for they all lose their clue before they can be supposed to reach the mind herself. Those channels are now generally agreed to be the nerves propagating the impulse of external objects to the brain, and others of them carry back from thence the voluntary motion by which we move our limbs. The same Boerhave tells us they are innumerable in multitude, all conducting to the brain whose medullary substance is made up of them: that each has its distinct office, for the optic nerve is not capable of conveying sound nor the auditory of colours, and so of all the rest; therefore they must all have some communication with
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the mind, for else we could not receive the variety of sensations we do by their ministry: that they all terminate in the two anterior ventricles of the cerebrum or brain, where their last operation is performed and of whose arched surface they are the component parts; which surface he therefore calls the sensory or place of our ideas. In section 574 of his lectures he has these words: “ The
 “ spirits must have a free course [through
 “ the nerves] from their origin in the brain
 “ from every point thereof even to those
 “ muscles which are under influence of the
 “ Will. Hence follows that the sensory is
 “ a part of the brain where all those points
 “ are collected together.—The sensorium
 “ is that part of the body where the action
 “ of all the sensitive nerves terminate, and
 “ from whence the influence of the Will
 “ first begins to operate upon certain muscles. This common sensory seems to be
 “ seated where the ultimate lymphatic arteries unite with and fill the beginnings of
 “ the nerves with spirits through all the
 “ ventricles and inequalities of the brain.
 “ But the territories or limits of this sensory seem to be very large and various,
 “ so that each nerve has its particular part
 “ where those ideas dwell which are conveyed by the same: the ideas of odours about
 “ about

“ about the termination of the olfactory nerves,
“ of colours about that of the optic nerves,
“ and of motion about the nerves subservient
“ to voluntary muscles, &c. It cannot be in
“ the pineal gland, for so many thousand
“ nerves can never take their origin from so
“ small a particle, but in the arched medulla
“ encompassing the cavity of the ventri-
“ cles.” This cavity then we may take
leave to entitle the palace of the mind where
she keeps her constant residence, but can
with no propriety be stiled the royal apart-
ment as being by much too large for her per-
sonal occupancy: for that sphere of presence
which once lay enclosed in the ant-like foetus
or diminutive animalcule can never fill the
whole circumference of so spacious a build-
ing. Therefore there must necessarily be
some connecting medium between, and from
hence we may draw no feeble argument for
the reality of our vehicle, whose imper-
ceptible fibres we may reckon her domestic
servants who continually bring her the mes-
sages they receive at the doors and windows
of her palace from the medullary nerves, and
carry back her orders to the like nerves for
them to forward to the muscles. Thus the
mind lies enveloped with two bodies, the
inner or vehicle which I beg leave to stile the
Ethereal, not that I pretend to know it is
made

made of ether, but to distinguish it from the gross outer body, which I would call the Elementary, as being taken from the dust of the ground aptly mingled with three other known elements of fire, air and water.

7. We learn likewise from the above cited lectures that the little animalcule gets into the ovum through the fresh wound of the calyx or stalk newly broken off from the ovary. If this animalcule has a slender elementary body (as it may be presumed no animal is without one) we may suppose it presently to dissolve and the pieces discharged back again at the same aperture of the calyx, upon which the vehicle being left naked may adhere to the ovum in many points, which as that grows and expands are drawn out thereby into strings until in process of time they take the form of a spiders web stretching throughout the whole compass of Boerhave's sensory or arched vault of the ventricles in the brain. For that interior part of the ovum whereto the vehicle co-alesces may be counted an incipient brain, because it is observable that the formation of all animals begins by a brain; from thence grow the cerebellum and spinal marrow, from them the heart, arteries and bowels, then the muscles, tendons, gristles, and lastly the bones. For all parts of an animal are nothing else than bundles of exceeding

ceeding fine threads or fibres variously knit together; which in their loosest texture compose nerves, when a little more compact they form muscular flesh, glands and membranes, as closer and closer bound they make tendons, sinews, vascular coats cartilages, and when tightest become bones, in one of which, the os petrosum or rock-bone of the ear they grow into a substance hard as steel. This web-like expansion of the ethereal strings being an unnatural state, it may be presumed that when upon death they get loose from the medullary fibres, they will contract into their main body, like the horns of a snail upon your touching them: but it is not impossible they may carry with them some particles from the grosser nerves whereto they had adhered, whereof may be formed another slender elementary body minuter than that which invested them before in the animalcule. It is easy to comprehend that the vehicle lying so long enclosed in the body wherewith it is connected, to whose action it must be perpetually subject, may receive some alteration in its make and texture therefrom; and thus every form of being it undergoes may affect its condition in the next. It will appear evident that the animalcular state has an influence upon the human when we reflect how much children take after their fathers

thers as well in their outward lineaments as in the temper of their minds: but the father contributes nothing more to the composition of his child than by furnishing the animalcule. Therefore there seems ground to imagine that the animalcule, differently constituted according to the humours of the body wherein it was bred, either moulds the little ethereal inhabitant enclosed in it variously; or when having nestled in the ovum breaks in different places and so causes it to catch hold of different fibres thereof. From hence may be understood how the course of this life may naturally have an influence upon the next; for the vehicle may be differently affected according to the manner wherein it stands connected with the gross body, receiving some change of disposition from the deeds and words and thoughts passing during its conjunction therewith, more especially from the settled habits of acting and thinking practised therein. And since the laws of nature are all established in perfect wisdom tending unerringly to good and holy purposes, it seems more than likely that vicious courses will endamage the little ethereal body, incrustating its fibres with terrene concretions so as to render them stiff and useless, or fixing too many and too gross elementary particles upon them which when drawn into their main body will prove grievous

grievous hindrances and painfull disturbances there, or stretching them beyond their strength with the eagerness of sensual appetites which will render them feeble like a strained sinew or flaccid like a paralytic muscle: whereas the practice of virtue will strengthen, supple and mature them, and suffer no more elementary matter to adhere than will grow into an agile healthy body adapted and subservient to all their uses.

8. There is one stumbling block that may lie in the way of many against admitting the doctrine of animalcules, because for one that finds entrance into an ovum there must be millions that perish: but let us consider that when they perish (as we call it) they are not annihilated, they are only cast into the same condition with every soul just then departed that has lived fifty or eighty or a hundred years. For death levels all, not only the prince and the beggar, but the frisking animalcule, the sleepy foetus, the sucking child, the wanton school-boy, the positive stripling, the state-mending citizen, the doating great-grandfire and the longevous antediluvian: all go into the same world and all partake in the same form of Being, only with different constitutions according to the length and circumstances of the corporeal stages they have passed through. Which if
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it be a better world than ours, best fares it with him who can soonest get admittance into it: so that as before observed, it may be true what some ancient sages have affirmed, that the luckiest thing could have befalln a man was never to have been born. Nevertheless this ought not to lessen the due cares of our self-preservation, for life considered in itself is undoubtedly a blessing for which we have abundant reason to be thankfull, and if it be a misfortune it is only comparatively so by detaining us from a happier state: yet even in this light we ought to value it as believing ourselves stationed here for some service accruing therefrom to the community whither we are going; and to resign it willingly upon summons, because that is an evidence that the necessary service is performed and we are called to receive the wages earned thereby. Therefore we cannot do better than follow Milton's advice, What thou liv'st, live well: how long or short permit to heaven.

9. But small as these ethereal vehicles are we need not apprehend lest their slender bodies should be driven to and fro by storms or tossed about in whirlwinds, for whoever pleases may imagine them conveyed by some law of nature to the fields of ether where all is calm and serene: or taking shelter in the pores of solid bodies as we do in our houses until the tempest

tempest is blown over. But these expedients are not requisite, for their own minuteness will preserve them against such like injuries. We are told by naturalists the particles of air lie at a great distance in proportion to their bulk, so that there is room enough for them to pass on each side of those little bodies without touching, as we know the rays of light from innumerable stars cross one another in all directions without interfering: or if any one of them should happen to strike it would do them no more hurt, considering their lightness, than a stone thrown against a feather hanging loose in the air.

10. Perhaps it may give disturbance to some folks to think of being reduced to such contemptible animals tenderer than a worm and weaker than a flea: but let them consider that the strongest creatures upon earth are not the most favoured by nature, the mighty elephant, the vigorous horse and the unwearyed ox are governed by man, and among our own species the most robust and athletic are generally of the lowest rank. If strength be desirable why do our fine gentlemen throw away what they might have of it by intemperance, sloth and effeminacy? But the strength of creatures need only be proportioned to their wants of it: what would the ant be better for the vigour of the horse,

or the polypus for the mighty sinews of the whale? those insects have force sufficient to carry in their provisions and draw in their prey and more would only make them dangerous to one another. We in our present state have large works to do in providing for our sustenance, our cloathing, our habitation and accommodations of life, powerfull enemies to cope with and great beasts to employ in our services, all which we could not manage without a consistency of flesh and bones and some competency of bodily strength: but the vehicular people have no such bulky wares to move about, such massive stones to heave, such beasts of prey to contend with nor such beasts of burthen to break to labour: therefore though their strength be trifling in comparison with ours it is greater in proportion to the objects they have to deal with and sufficient to serve them in the employments and amusements suited to their station. Or if it were a little defective they may supply their want of force by their greater sagacity and agility.

II. For their bodies contain nothing superfluous nor that number of vessels concerned in our animal circulation, but consist chiefly of sensory and motory fibres; so that every part lies within the observation and under command of the mind. If anything in-

sinuate into their composition which might create diseases they can remove it as easily as we can wash the dirt off from our hands: their faculties are more piercing, their understandings better furnished with materials and less liable to be overclouded than ours: and they can throw their vehicle occasionally into such form as to receive what kind of sensation they choose from external objects, so as to make it all eye or all ear or some other sense we know nothing of, or a mixture of several. Nor need we fear lest a multiplicity of ideas should perplex and confound them, for perceptions take up no room in the mind nor does she ever find herself unable to receive as many as her organs can excite. Confusion springs from the darkness and imperfection of our ideas, not from an incapacity in the mind to perceive such as are presented clear and distinct. And as they are fitted for discerning minuter objects than we can distinguish, they will have an opportunity of observing the motions of those subtil fluids whereon gravitation, cohesion, magnetism, electricity, heat, explosion, vegetation, muscular motion and sensation depend, which will furnish them with sciences to us unknown. We find that light discovers to us the form and situation of bodies at an immense distance, and when we reflect how ex-

tremely movable and elastic the ether is known to be, we may conclude that no single particle of gross matter can stir without affecting its vibrations to a prodigious distance: this then may answer their purposes better than light does ours, and inform them accurately of the positions, the distances, the magnitudes, the motions of all the visible universe. By which means they will have a full display of nature before them from the most magnificent of her works to the most curious and minute: nor can they fail of rising from thence to a compleater knowledge of the author of nature, his greatness, his wisdom, his goodness, than we can attain. And perhaps they may fathom that to us inscrutable mystery, the origin of evil, so as to reconcile it perfectly with their ideas of unlimited power and infinite goodness.

12. Nor can we deny them the means of discourse and correspondence with one another: ours we know is carried on by arbitrary signs either of sounds or letters, and any other marks that might be exhibited with equal facility, variety and distinctness would do as well: therefore we cannot but suppose that such agile creatures, all nerve and sensory, may form characters upon their vehicle, or throw off little particles of the fluids surrounding them, or find twenty other ways

ways of communicating their thoughts. Nor can we deny them methods of transporting themselves from place to place, not in the manner we walk by pushing our feet against the stable ground, but rather like the steerage of a ship whose sails are set before or sidelong to the wind, receiving the direct or oblique impulse of the little streams passing continually on all sides of them, with such dextrous management as not to be thrown aside from their intended course. It would be in vain to conjecture what are their common employments and amusements, but enough has been suggested to show they do not want for either, and perhaps we may find more subjects to occupy their time than these: but amid the variety of objects and ideas continually presenting it cannot be doubted there will be some of the agreeable and disagreeable kind which will demand their care to procure the one and avoid the other or to assist one another upon occasion, from whence will arise desires and aims, prudential maxims and rules of conduct, the one perpetually instigating their activity, the other directing their measures. And if the idea of evil be requisite to action, they will not want samples of actual suffering in some of their compatriots who will come infirm and maim-

ed into their world by reason of hurts received in ours.

13. But how much soever they abound in methods of business and enjoyment, sciences and accomplishments, we must imagine them totally dissimilar from those which occupy and entertain us here, for our ways of thinking and acting would neither be of use nor could be practised among them. What service could our knowledge of agriculture, of manufactures, of painting, of politics, of navigation do them, or what materials could they find to exercise it upon? Where is there room for optics among those to whom the corpuscles of light are so gross as to be objects of touch rather than of sight? of mathematical lines and angles among bodies continually moving? of our virtues when the passions they restrain solicit no longer? of our moral theory when human nature is exchanged for another? of our natural religion to those who may quickly strike out a better from the fuller display of nature lying before them? Nor are our mental acquisitions of a kind to be portable with us upon our departure hence; our first stock of materials is all thrown in by the senses, nor have we anything else but what is made up by working upon them: our abstractions have all some reference to sensible objects or their motions

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or changes or actions upon them. Our imagination we find connects with the animal machinery, and so does our memory, the foundation and repository of all our knowledge; for the images and traces in both appear stronger or fainter or not at all according to the temperature and disposition of the body, according to the stages of infancy, manhood and old age: and that fatigue, that briskness or lowness of spirits, that earnestness or flushing of the face, that tremour of the nerves brought upon the grosser part of our frame by our several courses of thinking make it more than probable that not a thought stirs in the mind without some correspondent movement in the vital circulation. Therefore the springs employed in working all our various turns of thought being removed we can expect to have no more of the same ideas return: and we shall be better without them, as they would be troublesome to us by continually raising wants that could not be satisfied and putting us upon methods of exerting our power that would not be feasible, as not having the same limbs nor instruments nor materials nor objects as are provided for us here.

14. We have shown in CHAP. VI. that percipience and rationality are secondary qualities resulting from a composition of fine

matter curiously organized together with a perceptive spirit vitally united thereto, and this spirit so circumstanced is what we understand in common discourse by the rational soul. For we are currently held to be born reasonable creatures, that is, capable of reason or having the rational faculty, for we do not attain the use and exercise of reason until some years have passed over our heads wherein experience has furnished us with materials to think and reason upon. So then this vehicle or inner sensory constituting us rational creatures we received before our birth: it continues with us during our lives, enabling us to perceive and understand the notices brought from external objects by our bodily organs, the traces lying in our memory and all those stores of knowledge contained in the repository of our ideas: it remains entire after dissolution of the body, and though it can neither think nor reason after losing all its former ideas and materials to work upon, yet retains its rationality and cogitative faculty ready to be exercised upon whatever objects a fresh set of senses shall throw in or new experience supply. Nor let it be objected that I make the memory one of those parts that shall be left behind, so that the naked soul, how quick soever its perceptions may be, will have no retention; for though I have

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have supposed the vehicle almost all nerve and fibre, it may contain a small mixture of other parts capable of working into traces, or those parts which are kept soft by their present covering may harden upon being more exposed and become stiff enough to retain impressions, or new particles adhering from without may form a membrane fitted for the like purpose. But without troubling ourselves to conjecture the particular manner we may depend upon that wisdom by which all the laws of nature are established to provide means of exercising so necessary a faculty without which there can be neither understanding nor reason, neither prudence nor judgement. Thus we may conclude that the soul will be born into another life as much a blank paper as ever she came into this, having all the characters formerly written upon her totally expunged but capable of receiving any new ones that shall be written from thence forward. And though we shall not be wholly disengaged from matter, it will be of a very different frame and texture from our present: for we are told there is a carnal body and there is a spiritual body, and that what grows from the seed is not that body which was sown, but God giveth it another body. And this he gives, not with his

his own hand, but by the stated laws of nature and instrumentality of second causes.

15. But this vehicle lying so long enclosed in the human body cannot fail of receiving some little changes in its texture from the continual play of our sensitive organs and action of our animal circulation thereupon: for every sensation and every suggestion from our memory or reflection passes through that in its way to the mind and though each singly may affect it no longer than for the moment of its passage, yet by being frequently repeated they will work a durable effect. Just as if you press your nail upon the back of your hand the flesh will return to its smoothness as soon as you take it off, but if you do this for hours together every day the skin will part asunder and leave a dent between. The variety of our ideas can be owing to nothing else than the various figures or modifications of the organs exhibiting them, and as they act upon the sensory this during their action must correspond with those modifications: so that every time a man sees a colour his sensory takes one modification, when he hears a sound another, when he meets with something to make him laugh another, when he meditates seriously another, so when he is angry, affrighted, afflicted or joyfull, every affection gives a different disposition to his sensory.

And

And as we have each of us particular courses of thinking wherein we are led to travel more frequently than in any others by our several habits, our passions, our desires, our education, our situation in life and the objects most familiar to our senses, the ideas passing almost continually in the same track will work the tender sensory thinner in some places and leave it thicker in others, separate the fibres or drive them closer together, stretch or contract them, and cause various alterations in their condition and texture. So that every man goes out of the world with a differently modelled vehicle according as he has been a soldier or a scholar, a merchant or a mechanic, a gentleman or a labourer, according to the pursuits and expectations that have taken up his thoughts, the successes and disappointments, the joys and afflictions that have hung upon his mind, the occupations and amusements that have filled up his time.

16. Nobody can help observing how much the condition and tenour of our lives depends upon the constitution we bring into the world with us, upon the strength and health of our body, the sagacity and natural talents of our mind; and we must acknowledge these affected by what passes in the womb: 'tis there the eyes and ears, the legs and hands, the lungs, the instruments of speech, the ta-
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blet of the memory, the organs of reflection are formed, all which are of no use to the foetus but of necessary use to the living man. Nor can we well avoid concluding from the similitude discoverable in the ways of nature that we carry about within us a little foetus continually forming and fashioning by the gross body wherein it lies enclosed, that according to the nourishment and action received therefrom will be its future lineaments and character, constitution and quickness of parts, and that as men are said to be born here poets or painters, politicians, mathematicians, navigators or mechanics, so they will be born hereafter with talents fitted for particular acquisitions and employments. Neither must we imagine the forming foetus uninfluenced by our manner of conduct in our several professions and stations: the practice of virtue invigorates and supple the little limbs, strengthens the senses, quickens the faculties, improves that small mixture of unfibrous matter which may serve as an integument or instrument for the uses of the soul. Whereas vice debilitates, distorts, overclouds and benumbs the soul and fixes too much of the terrene concretion so as to disturb the operations of the nobler parts. As opposition is not my favourite passion I shall not dispute that punishment may be inflicted by the immediate

mediate hand of heaven or the ministry of devils employed to torment those who are judged objects of the divine wrath: but I think the same purposes may as well be answered by supposing misery the natural consequence of wickedness. For who but God holds the reins of nature in his hand, establishes her laws and ordains her courses? so that whatever they bring forth is as much his doing as what is done by other instruments: nor is there the less discouragement to sin if evil follow inevitably upon it, whether this be brought about by the operation of necessary or voluntary agents. But that a mighty weight of suffering may be thrown on in the way I have assigned we may easily comprehend when we reflect on the miserable condition of those wretches who are born into this world diseased, maimed and imperfect, and how small a quantity of foreign matter in our bodily frame causes great inconveniences and disturbances. A grain or two of sand gives racking pain in the kidneys, and a much less concretion of terrene particles is likely to give acuter anguish in the more sensible vehicle: a drop of rheum in our joints disables us from using them, and the like obstruction in a finer body would render it incapable of helping itself against impending dangers, so that it might incessantly be rapt in whirlwinds or buffeted

fetted about by the agitations of fire for want of power to extricate itself: a little thickness of blood in our brain fixes an incurable madness, and a similar foulness in the naked sensory might overwhelm the soul with perpetual delusion and perplexity, tormenting fears and jealousies, intolerable horror and despair.

17. Thus we work out our future fortunes by our present behaviour and fit ourselves unknowingly for the several parts we are to act upon the next stage by practising those assigned us in this: so that we may look upon life as a necessary preparation to qualify us for the employments of another state. And when I consider the vast variety of engagements and amusements among mankind, the very different characters and employments of the several nations upon earth, the many unavailing hours passing over our heads, the great loss of time in sleep, all which cannot be accounted for from their uses here, I should regard this conclusion as more than hypothetical if it were not for one objection occurring, which is, the multitudes of human souls passing directly into another state without touching upon this, and so capable of receiving no preparation thereby. From this observation we may gather that the rational soul is compleatly formed in all its essential parts before entrance into the human body,

body, and that the fashion and lineaments it afterwards takes by long habitation therein are not necessary for its subsistence in the vehicular state, but preparations fitting for some particular functions usefull or convenient there. Perhaps the arts and sciences, the rules of public and private conduct may be struck out or quicker attained by souls who go thus prepared, and the others may enter into their new life in a state of infancy similar to that they would have been born in here. I know we reckon children more docible than grown persons, but then it is of such childish instructions as are forgotten again afterwards and serve only to give the mind a firmness for the reception of more solid knowledge. But those who want this preparatory firmness acquired by the exercise of their faculties upon earth will have a singular advantage in another respect, for they will be free from that terrene concretion and remains of the carnal part bringing on the inconveniences, disabilities, pains and mental disorders spoken of in the last section; and as they can do nothing to improve their future condition so neither can they do anything to hurt or incommode it.

18. And if the next life begins for the most part like the present in tender infancy, this will require the cares of the old inhabitants

to overlook and cherish it: so that the business of nurture, education and parental fondness will be no less considerable sources of employment and amusement among them than among us. For there being neither marriage nor generation in that country, they will provide themselves families by a kind of adoption out of the new comers continually flocking in upon them. Nor will they want means to direct them in their choice: for though we have denied them all remembrance of what passed during their abode here, there are other ways of discovering former relations and connections beside that of inspecting the traces in our memory. If it were not so common among us we should be astonished to think how a man, by looking upon a few scratches upon paper, according to the shapes in which they are drawn shall come to the knowledge of what his senses and his experience could not have informed him. By this way my friend at a hundred miles distance may know where I was yesterday, what I was doing and what I thought of in my most retired meditations: and by this way we know what was done two thousand years ago in the days of Hannibal and Scipio. But though this be accomplished by the consent of mankind affixing certain ideas to certain characters, let us consider whether the

the like intelligible writing may not be exhibited by nature in the dependence of effects upon their causes : so that disembodied souls, having acuter faculties than ours, and improved them by long application and exercise, may acquire a dexterity at investigating causes from their effects, know precisely what has happened from what they see happening, discover their own pre-existence, trace out all that has befallen them in their former state, become acquainted with the history of mankind, learn by the manner and condition wherein the new comers arrive from what parts they must come and discern from a resemblance of features that the same causes must have operated upon them which have affected themselves. By these marks they may find out a wife, a child, a brother, a friend, a neighbour, a compatriot, and what is more than we could do with our remembrance, may distinguish their descendants who never came to the birth or were snatched away from their cradle. The endearments arising from these discoveries must double their diligence in the tendency of those who come helpless and relief of those who come contaminated with such impure mixtures of their former composition as can possibly be removed. Nor if particular inducements were wanting would they want the spur of general benevolence to the ra-

tional species, which is ever more growing in proportion to the clearness of judgement and extensiveness of understanding.

19. Upon this view of the two worlds it appears there is a mutual connection of interests between them: for we are interested in what befalls us here not only as it affects our present condition but our constitution and talents hereafter, and likewise with what befalls other people in distant corners of the earth with whom though we have no dealings now we are likely to have in time to come. And the people of the invisible world have an interest in all that happens among us, as it tends to form the genius, abilities and characters wanted for future services among them. Nor yet need we fear their interfering in our affairs, for their forces are too small to set masses of matter in motion capable of affecting any of our senses: or were they able they have something else to do than amuse us with idle dreams to terrify us with ghastly apparitions: neither can we suppose them so imprudent as to disturb the courses of nature and fortune which they must be sensible are wisely provided with regard to the benefit of their own community.

20. For that a community they have we cannot well doubt when we reflect on the variety of dispositions wherein we quit our present

present mansion to take up our abode in theirs. For if we were to live single and apart from each other one kind of preparation would serve us all, but the great difference among us in our manner of living and dying indicates a like difference of occupation in the country whereto we are going: and as a nation cannot subsist here without a variety of professions to supply the wants and conveniences of the whole, so there will be a public interest there to be served by members variously qualified contributing their several parts to the general emolument. For where one individual wants what another can supply, this will naturally lead them to seek each others assistance and unite them into a regular society.

21. But tho' the rational soul or vehicle survive the body we cannot conclude from thence that it will live for ever: on the contrary the numbers daily pouring in from hence upon the next world seem to require a proportionable drain somewhere or other, for else the country might be overstocked; but where to dispose of their superfluous members is the question. Some have supposed the soul to migrate to and fro between the two worlds and that after passing some ages in the other it shall return back into a fresh body and so be born again as at first in the usual manner of generation. But this notion pre-

vailed no longer than while the thoughts of men were narrow, while this globe of earth with the atmosphere surrounding it was esteemed the whole of nature, while the most enlarged understandings could conceive the sun and moon as little bigger than Peloponessus and the stars as fiery meteors rolling round the upper regions of air: so that the soul could never soar above the reach of terrene exhalations which adhering and gathering round it might weigh it down again to the earth from whence it rose. And perhaps after all the doctrine of transmigration was never seriously held by those who taught it, but employed only as an hypothesis to make the future advantages of a virtuous life more intelligible and striking to such as could conceive no other enjoyment or suffering than what may be conveyed through bodily organs. Nor is it likely the soul should return again to her former confinement, for we see every thing that has life grows therein, animals as well as plants, and whatever lay enclosed in integuments, bursts forth too large to be contained in them any more: the little silk-worm just crawled from its egg or the moth from her chrysalis could not creep into them again, nor could any art replace the seeds of vegetables in their husks. But if the vehicle be not sustained by nutriment which might encrease its growth,

growth, nor swell instantly upon coming out of its case, nevertheless it may gradually expand by the continual action of the spirit within so as to be no more capable of lying within its former receptacle than a man is of re-entering his mother's womb. And this expansion cannot fail of introducing stages into the vehicular life similar to those of youth, maturity and age; the last not indeed attended with the pains and infirmities accompanying it here, but distending and separating the fibres of the vehicle until at last they open and let loose the enclosed spirit, which will then fly off naked and alone. But tho the spirit, no longer vitally united to any corporeal particles, either ethereal or elementary, which used to serve for a conveyance of ideas and instrument of volition, must lose its rationality, percipience and active powers; it will retain its two primary faculties of perceptivity and activity: and whoever admits the doctrine of final causes and nothing made in vain can hardly suppose they shall lie overwhelmed in eternal sleep, or that means shall ever be wanting of exercising them. But what means of perceiving and acting we can imagine supplied to pure spirit totally disengaged from matter and divested of all organization whatever, we shall reserve for the subject of the ensuing chapter.

C H A P. XXII.

M U N D A N E S O U L.

WHEN I consider Bishop Berkley's notion of the non-existence of all bodies and that the appearances they seem to exhibit are only perceptions raised in our imagination by the Divine power, I cannot help wondering that he did not go on to deny the existence of all spirits too; for we have no better evidence of the latter than of the former. How know I there are any other persons in the world unless by seeing them before me or hearing them speak? and if they have no real bodies nor there be any real air whose vibrations bring the sound of their discourses to mine ears, what reason have I to believe there are any real Beings whose action occasions the motions of those bodies or that air which are purely imaginary? So that if when I see the sun rise in the morning, ascend to the meridian and set again in the evening, trees buffeted about by winds, or rivers rolling along their foamy waves, the whole be nothing else than a succession of ideas in my own mind: by the same rule when I behold my friend enter the room, and hear him talk to me

me of various subjects, perhaps I am alone all the while, and what I take for the sound of his voice is nothing else than a like succession of perceptions excited in me by the same power that excited those of the sun, the trees and the rivers before mentioned. From hence it will follow that possibly there may be no more than two Beings in nature, God and myself. Thus, if we give way to the suggestions of a lively fancy and think ourselves warranted to take any thing for certain the contrary whereof cannot be mathematically demonstrated, we shall never know where to stop. But as these notions are apt to hang upon the minds of the speculative, I know of no better receipt to cure ourselves entirely of them than by setting up opposite notions equally possible and equally incapable of being demonstratively disproved. If it cannot be made appear with absolute certainty that there is that multitude of objects existing without us which we daily see and handle, neither can it be made appear with the like certainty that there are not multitudes of sentient Beings in the composition of every man. We know so little the nature of spirits that we cannot tell how a number of them lying contiguous together without any bars of flesh intervening would affect one another: perhaps a perception raised in any one of them by some particle of mat-

ter would run instantly through them all quicker than fire does among the grains of gunpowder. If this be the case for ought we know there may be many spirits contained in one sensory: nor is there any need the corporeal organs should operate upon them all, for whatever sensations, judgements or ideas are exhibited to each of them will immediately be apprehended by the whole number. I have shown in CHAP. V. §. 9. that every time we look upon a chess-board covered with double sets of men we have at least sixty-four particles of matter operating upon us at once, and considering how many corpuscles of light are requisite to give the sight of every single piece, if I had said sixty-four thousand I had been likely to come nearer the mark: now if there be the like number of spirits in the human soul, each may receive the action of one particle and yet, their perceptions being communicated, every one will have a distinct sight of the whole chess-board. Thus instead of being the sole inhabitant of the universe, as I might persuade myself upon Berkeley's principles, I shall not be the sole inhabitant of my own pericranium, but one member only of a most numerous family lodged there.

Nor let it be objected that 'tis much I should know nothing of my fellow lodgers if there were such multitudes of us together

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in one chamber : for I know nothing of those inner ends of my organs which impress sensations upon me ; besides that receiving no other perceptions from my companions than they first received from matter, I have no mark whereby to distinguish them therefrom. Neither can it be urged that there would often arise an opposition among us, some would be for walking while others choose to sit still, some would want to stretch out the hands while others had rather keep them folded in the bosom : for if there be a variance of opinions in all numerous assemblies of mankind, it arises from their having their several views, designs and judgements and seeing things in different lights ; but we coparceners of the same sensory should constantly have the same ideas, the same appearances, the same motives exhibited to us, and discern satisfaction resting upon the same point. When our stomach grew empty we should all at the same instant feel its cravings, if a well spread table were set before us we should all be guided by the same palate to stretch out our hands towards the same dish : and thus we should proceed in all our measures with such perfect conformity that each would think himself the sole author of our actions, and our every motion appear to by-standers as actuated by one agent. 'Tis pity somebody did not hit upon
this

this thought at the time when disputes ran high upon original sin: he must certainly have made his fortune by it and perhaps risen to be a Cardinal, for he might have demonstrated (as a little matter will amount to demonstration on the right side) that the spirits of all men were contained in Adam's pericranium and of all women in that of Eve, and so were actual partakers of their transgression; which would have overthrown the objection of infidels against the punishment of descendants for the sin of their primogenitors. But as such a notion now a days is not likely to raise one to preferment I may e'en reject it as an idle fancy, fit only to be opposed against the no less idle fancy of Berkley's, that all about us is nothing but idea and delusion. Nevertheless I have received this benefit from letting my thoughts roam a little upon it, that the communication of perceptions among spirits, whereby many of them may discern ideas exhibited by one sensory, has furnished me with a hint for understanding that old notion of a Soul of the world, in such manner as to make it a fit receptacle wherein those who depart from the vehicular state may be absorbed. I shall now pursue my ideas upon that subject, not barely as a commentator expounding what has been said afore time, but taking the liberty to new model it in some few particulars

particulars which I think may render it more intelligible and answerable to our present purpose.

2. The doctrine of a Soul of the World, otherwise called the Mundane or Universal Soul, must be acknowledged of very ancient date, as old at least as the Ionic philosophy; and seems to have been generally embraced by the most eminent sages of antiquity. They held it eternal, immutable, compleatly wise and happy, extended throughout the universe, penetrating and invigorating all things, the maker of the world and all creatures therein, the fountain of sense, life and motion from whence the souls of men and animals were discerped and, after dissolution of their bodies, absorbed thereinto again; and they gave it the appellation of God. Their calling it by this name has made it generally believed that they meant thereby the Supreme Being; so Pope understood them when he talked of one stupendous Whole, whose body nature is, and God the soul; so likewise many of their followers understood them, which gave occasion to those pompous expressions of the human soul being a ray of the Divinity, an efflux or emanation from the substance of God himself: expressions which have no other foundation than in human vanity and arrogance. The doctrine thus interpreted

puted became liable to just objections; as that it made God to consist of parts some of which might be discerped from him, and that the Divine substance being cloathed in body might become imperfect, passive, weak, ignorant, susceptible of error, sin, pain and misery.

3. But I apprehend the mundane soul originally was not intended to be understood of the Supreme Being, but a created God dependent on him for its existence and faculties, produced from everlasting by his almighty power and good pleasure: and though it was supposed the maker, it was not supposed the creator of all things, but to have formed the world out of pre-existent materials according to a plan assigned it. The ancients, even those who held the unity of the First Cause, did not, like us, appropriate the term God to him alone, but applied it to other Beings of an order and intelligence superiour to man. Seneca speaks of the Sun, the Moon and the Planets as Gods, and I suppose he would have called the four elements so too for he ascribes sense and understanding to them; yet he acknowledges one supreme God over all, whom he stiles the Rector of the universe: and we read in our bibles that there be Gods many and Lords many. Therefore when we find the ancients talking of God we must not
always

always take them in that restrained sense wherein we now use the word : and that it is not to be so restrained when applied to the mundane soul may appear from the *Timæus* of Plato.

4. By this exposition we escape the objections afore mentioned, for the human souls being now no longer thought parts of the Divine substance may be supposed capable of pain and weakness without the absurdity following upon the former construction. Yet there still remains another objection arising from the individuality of the mundane soul, which we find spoken of as one entire thing, one Mind, and therefore cannot, like compound bodies, consist of distinguishable and separable parts to be discerped from it. Besides that this doctrine seems to confound and destroy the distinction and personality of particular souls, for they were not created upon their discription, the substance of them being already existent in the universal soul, but before any of them were discerped there was but one created mind in nature, therefore they were then the same person with that mind and consequently with one another : yet upon their immersion into matter we see they are distinct persons and things, one doing and perceiving what the others do not and perceive not ; again upon their separation
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from body they will lose their personality and distinction being absorbed and resolved into their original principle. The ancients perhaps did not think themselves affected by this objection, having no correcter notions of individuality and substantial identity than our modern vulgar, who imagine that even bodies may impart something from their substance without diminution of the mass from whence it issued, if they perceive no visible alteration therein. Thus the vapours rising from the sea were part of its substance and drawn up therefrom, but when formed into clouds we deem them distinct substances, nevertheless we consider the sea as remaining always the same body of waters notwithstanding the vast quantities continually exhaled by the Sun. In like manner the rivers seem to have a Being of their own no longer than while running in their channels, for when intermingled with the sea we look upon them as lost and swallowed up in that, which nevertheless we apprehend to be the same substance it was before their influx.

5. But it has been observed in the beginning of this volume that compounds are creatures of the imagination, nature making all things by individuals, therefore compounds having an ideal existence only may well preserve

serve their identity notwithstanding an increase or diminution or change of their component parts, provided those changes be made imperceptibly and do not work any change of appearance in the whole. Thus the Thames is always esteemed the same river because we always see waters running between the same banks, although the waters running to day are not the same that run there yesterday: and if in a summers evening we see a mist rise up out of the Thames, the mist exhibits a new idea we did not discern before, therefore we conceive it a new Being produced from the substance of the river, which yet we suppose remaining the same without diminution because we do not find it abated in its fulness. So likewise if we throw a handfull of salt into the river, we lose the appearance of salt we had before and apprehend it destroyed by being diffused among the substance of the water. But when we turn our thoughts upon individuals, the only real existence in nature, we cannot reconcile them to any transmutation of substance or production of one thing out of another. We have made appear in CHAP. III. that there are atoms actually if not potentially indivisible and each of them, however disposed of or wherever placed, whether in a drop of rain, in a river or in the sea, must always continue identically

identically the same, numerically distinct from all others how closely soever united to them or how indiscriminately soever mingled among them. And with respect to spirits the case is stronger, for they have a personality annexed from which they cannot be divested without losing their existence. I have been a child and am now a man; I have been in joys and in troubles; I may imagine myself transformed into a lion, a sheep or an ostrich, inhabiting the vehicular state, or wholly disengaged from matter and mingled among similar spirits: yet in all these changes I should still continue to be myself, for from the moment I began to exist I must have been myself and must remain so until I cease to be at all. Nor is it possible to understand that what was once another person should become Me, or I should become or be contained in another person: that there could ever have been perceptions in this substance which is Me without my perceiving them or actions performed thereby which I did not do.

6. Now without troubling ourselves to conjecture how the ancients would have removed this objection or resolving to understand their theory in all parts precisely as they did, let us endeavour to explain it in a manner conformable to our ideas whether discordant

cordant from theirs or no. And in this view I shall lay down that the mundane soul is one no otherwise than as the sea is one, by a similitude and contiguity of parts, being composed of an innumerable host of distinct spirits as that is of aqueous particles: and as the rivers continually discharge into the sea, so the vehicular people, upon the disruption of their vehicles discharge and incorporate into that ocean of spirits making the mundane soul. As for the discernption of souls from thence to inhabit human bodies I have no concern with that, the doctrine of pre-existence being now universally exploded: for every good woman knows for certain that we were created some little time before our birth for this plain reason, because if we had existed a hundred years before, some or other of us to be sure must have remembered what passed with us in our former state. And since many learned divines admit an intermediate state between death and the final consummation of all things, I hope that what has been offered in the last chapter concerning the vehicular people will not be counted heterodox. Nor let it be objected that the mundane soul already full and not having a proportionable discharge cannot contain the fresh supplies continually poured in upon it: for some have supposed that the fallen angels

have actually occasioned a considerable discharge therefrom. Or if this will not satisfy, let us consider that since creation is currently esteemed so common as to be practised every day in furnishing souls for children in the womb, we may as well suppose the same creative power constantly employed in producing new spaces, extending the bounds of the universe, and giving room for the mundane soul to expand according to the new members it continually receives.

7. We have found reason to conclude in the course of this work that all created spirit, as well as all matter, is homogeneous, and as bodies receive their difference and secondary qualities from the various forms and combinations whereinto the similar atoms composing them are thrown, so spirits derive their characters, their percipience, their rationality, their powers and faculties from the organizations whereto they are united or means of conveying perceptions supplied them: so that the spirit of an angel, a politician, a shoe cleaner, an idiot, a man and a child are intrinsically the same, differing only in their being variously lodged and circumstanced. From hence it follows that the spirits composing the universal soul are all of similar nature, having the same capacities, the same primary properties of perceptivity and activity, and altogether

altogether such as ourselves except these bonds of flesh wherein we lie imprisoned. But since we receive all our perceptions from our corporeal organization and have no other sensations than what come to us through the windows of our prison, it remains to enquire what sensations or reflections they can have after being disunited from all material composition whatsoever. As we live here separate and alone, each immured within his several cell, we have nothing to discern besides the modifications of the organs in our sensory, nor can we converse together unless by the intervention of some bodily medium, as of sounds or letters: but if we could have immediate intercourse with one another, who can say how much more expeditely, easily and clearly we might carry on our conversations? Suppose any two of us could thrust out that center of our ethereal cobweb which is the royal apartment or presence chamber of the mind through the pores of our cranium quite to the outside of our head, without hurting ourselves or cutting off its communication with the bodily senses, and then laying our two heads together could by opening some door of the said chamber bring our spirits into immediate contiguity with one another, who can tell what would ensue? Perhaps whatever either of us saw or heard or apprehended

hended by any of our senses or rose up in our imagination might instantly be discerned by the other. Perhaps this might not be a necessary consequence but the effect of choice, for both being possessed of volition we might select what perceptions we thought proper to impart and keep the others to ourselves, as in conversation a man is not obliged to utter all he knows but selects such of his thoughts as he judges worth hearing by the company: so that if I were eating apple pye and cheese and knew my companion had an aversion to the latter, I should communicate the one taste but suppress the other. We will now if you please draw in our ethereal web again for fear of its catching cold, and suppose one of us intending to partake in the diversions of Scarborough while the other stays in London: as soon as he is gotten there we will suppose a string of spirits reaching from him to me. As they are mighty little folks and perhaps penetrable by body they can easily insinuate themselves into our presence chamber without our feeling them, so that one end of the string might lie in contact with his perceptive part and the other with mine. Having this channel of conveyance ready at hand we should despise the tedious method of correspondence by the post, wherein we might sometimes be misapprehended or imperfectly understood

understood or at best could give but a partial account of what had happened to us: for our intermediate friends in the line of communication might transmit all that either of us saw or heard in either place together with our judgements and observations thereupon with a precision clearness and vigour equal to that wherewith we discerned them ourselves. Imagine further that we had a friend at Plymouth, another at Paris, another at Amsterdam, and that there were the like spiritual strings of communication from every one to every one: we should then all five have immediate knowledge of all that was worth knowing in the five places by perceptions continually transmitted along those conveyances.

8. I will not undertake to prove logically that perceptions may be thus imparted from spirit to spirit when all corporeal obstacles are removed from between them, having no positive evidence that I remember within the compass of my experience whereon to build an argument, nor ever conversed with another person unless by the usual means of discourse or writing or significant looks and gestures: but on the other hand it would be a bold undertaking for any to prove the contrary, for I suppose nobody remembers his having ever been in contiguity with other spirits and at-

tempted an intercourse of perceptions but without effect. Therefore in a matter so uncertain I may lawfully take the privilege annexed to an hypothesis and assume the affirmative. Having laid down this basis I must proceed to one assumption more, wherein I am as safe against confutation as I was in the former, and this is that all space not occupied by matter is replete with spiritual substance called the mundane soul, each part whereof, that is, each component spirit lies contiguous to others: so that there runs a continuity throughout the whole as there does throughout the waters of the ocean; for lines might be drawn from any drop in the Atlantic sea to every spot in the European, African or American shores surrounding it which should pass over rows of drops contiguous to one another. This being premised it will follow that by the mutual communication of perceptions every one may have those arising in every other. But, though I have assumed a power of imparting perceptions I cannot assume that of making them, for this would be running counter to experience. We cannot impart more knowledge than we have first ourselves, nor can the mind call up a single thought without employing some instrument to introduce it: for in all perception we are purely passive, receiving such from time to time as the modifications

fications of our organs excite in us. Since then such is the nature of our minds we must conclude that all perception must begin by the action of matter, how much soever it may be carried on by spiritual substance: and as although a man may come to the knowledge of transactions he never saw by information from other people, yet somebody must have been present at the transactions to begin the relation; so neither can the mundane soul perceive any thing without an object exhibited to some of its parts. But this need make no difficulty, for when we consider how the stars with their several systems of planets are dispersed up and down, how light, ether, and perhaps many other subtil fluids we know nothing of, are diffused every where, and that all these bodies, great and small, must lie contiguous to some parts of the mundane soul, we shall see there will not want objects for it to perceive. And as our sensations, reflections and judgements are impressed upon us by the configuration or motion of the particles in our sensory, so the variety of bodies floating about in the mundane soul may exhibit a greater variety of ideas thereto, whereby it may discern them all, their combinations and modifications, together with the comparisons and other relations resulting therefrom.

9. If we suppose every component spirit to perceive all that every other does, it will appear impossible that so vast an infinitude of knowledge can be contained in any created mind; and we find a multitude of objects, although distinct in themselves, confounds us merely by their number: but this is owing to the scantiness of our organs, for according as they are more copious in one person than another we find the same number of ideas appear clear or confused. Cesar could dictate to three amanuenses at once, and call all the Roman citizens by their names; and if it would perplex any of us to attempt the like it is because we have not the same quickness of parts, that is, the same fineness of organization. When we have so many visible objects before us that we could not admit another without confusion, we may still apprehend a sound or idea from any other sense distinctly. So that in our present condition 'tis our organs that set the limits to our understanding, nor do we know what our mental capacity is, our sources being too scanty ever to fill the vessel. We may possibly be capable of twenty senses, but being provided with inlets only for five, have no more conception of the others than a blind man has of light. Therefore we have no reason to confine the extent of the mundane understanding to the narrowness of our own,
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but rather to believe it much larger than any thing we have experienced or can imagine. Nevertheless large as it is we have no need to suppose it infinite, or that the objects discerned by every part are communicated to every other, for this communication being not a necessary but voluntary act, each spirit may impart such perceptions to his neighbour as he knows will be of use or entertainment to him, suppressing the rest: and thus every one having all the knowledge he wants or can be serviceable, may be stiled compleatly knowing although he does not absolutely know every thing. Thus the parts of the universal soul will serve for organs to each other conveying perceptions instantaneously from the most distant regions of nature, distributing to every one whatever information it concerns him to receive: for we know of nothing so quick as thought, nor that it takes up any time in its progress. And their knowledge being derived from one common fund they will all have the same sentiments, the same motives and rules of conduct: not that I imagine they will all have the same parts to act, for these must vary according to their several situations and the bodies falling within the sphere of their activity, but they will contribute their respective shares in perfect concert and unanimity towards carrying on
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one general plan. For we are not to think they have nothing else to do than transmit perceptions to and fro; but since we ourselves have a power of giving motion to our limbs, we may allow them the exercise of the like power although they have no limbs to move, for the bodies dispersed among them may serve for subjects of their activity instead of limbs.

10. Now in order to find what work there may be for them to do, let us cast our eye upon two known laws of matter, Gravitation and Cohesion. Sir Isaac Newton, who best understood them, declares that they are not inherent properties of matter but effects of some external force, which he supposes to be the repulsion of ether acting by different rules in the production of either. This ether, he tells us, is more dense, and consequently more elastic, in proportion to the distance whereat it lies from any gross body: therefore the ether on the most distant sides of any two bodies being stronger than that lying between them, drives them together and so causes their gravitation and makes them seem to attract one another. Therefore weight is made by the differential, not the absolute pressure of ether; for this, like all other elastic fluids, expands equally on all sides, pressing upwards as well as downwards: so that the ether beneath whatever we have put into a scale heaves
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it up, but the ether above, being a little further from the earth, impels it more forcibly downwards. Wherefore the weight we find it have measures to us the excess of force wherewith one ether surpasses the other, but discovers nothing of the precise force belonging to either. It may seem astonishing that so small a difference of distance from the earth as between the upper and under side of a common leaden weight in the grocer's shop should encrease the density of ether in so sensible a degree as that it may be felt by taking the lead into one's hand: but since there are many astonishing things in nature we will make no objection of this, but try to form some notion of what the absolute force of ether must be. If we could make an ether-pump, as we do air-pumps, we might ascertain by experiment what is the pressure on all sides of an exhausted receiver, but this being impossible let us seek for some expedient to supply the place of it as well as we can: and though I am afraid we shall find none that will enable us to make an exact computation of the strength of ether, we may hit upon such as shall convince us it must be exceeding great. If we toss a guinea upon the ground we know that it weighs there about a quarter of an ounce, therefore there is that pressure of ether upon it: but the ether repelling equal-
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ly on all sides, if another guinea be laid upon the former, will heave that up with the like force wherewith it pressed the other down. Nevertheless we know this other guinea gravitates likewise downwards with the weight of a quarter of an ounce, therefore the superincumbent ether must press with the force of half an ounce, the weight arising from the different repulsion of the two ethers. By the same rule if you put on a third guinea it will have a pressure upon it of three quarters of an ounce: and so on, how high soever you raise the pile, the uppermost guinea will always be pressed down with a force equal to the weight of the whole pile. Let us now imagine a hole drilled in the ground quite down to the center of the earth and then filled up with guineas, how many would it contain? To take whole numbers I shall suppose twenty to fill up an inch and the semidiameter of the earth to be just four thousand miles: upon these data we shall make the whole number of guineas amount to five thousand sixty eight million eight hundred thousand. But we must not reckon all these guineas to have their full weight, for whatever is carried underground loses of its weight in exact proportion as it approaches the center and when it comes there weighs nothing at all. But arithmeticians know that where numbers decrease in arithmetical

metrical progression down to nothing the sum of them all is just half what it would be if they were all of the highest number: therefore our column of guineas would weigh what half their number, that is, two thousand five hundred thirty four million four hundred thousand weigh in a scale above ground. Our next step will be to compute the weight of that prodigious sum. I have been told that at the mint they cut out a pound of gold into forty four guineas and a half: upon this footing we shall find our column amount to the weight of twenty eight thousand four hundred seventy six tons troy. Supposing then the pressure of ether at the center nothing which cannot be certainly inferred from the want of weight in things there, which is thought owing rather to the contrary attractions of the several parts of the earth around them balancing one another than to their having no attraction at all: but supposing the pressure nothing at the center, still that our ether at the surface of the earth must act with a force equal to above twenty eight thousand tons within so small a compass as the superficies of a single guinea.

11. Having found such an amazing force in ether we might think it sufficient to account for the attraction of cohesion too, which may well be stronger than that of gravitation

vation although depending upon the same cause: for the latter results only from the differential strength wherewith the upper ether exceeds the lower, whereas particles in actual contact can have nothing between to thrust them asunder, therefore will be held together by the absolute pressure against their outfides which we have found is more than enough to make them cohere stronger than any substances we know of; for I suppose a bar of any metal whatever equal in thickness to the breadth of a guinea would be broke asunder by a weight of twenty eight thousand tons suspended at the end of it. But there is this difficulty in deriving gravitation and cohesion from the same source, that since the density of ether encreases so fast as we have found it to do upon receding from the earth, things would cohere much more tenaciously at considerable heights than they do near the ground, and a wire upon the Pike of Tenerif would support a greater weight than might suffice to break it here below: but I never heard of its being found to do so by any experiment. Indeed the difference upon examination will not come out so great as at first sight one might expect, for the highest mountains being I think not above four miles above the level of the sea, the cohesion there will bear the proportion only of five hundred

hundred and one to five hundred compared with the cohesion here below ; a difference too small to be discovered by any experiments upon the strength of strings or wires. But then on the other hand it is found that attraction prevails between particles very near together though not in actual contact : in this case ether must find room to rush in between and push them asunder, therefore their attraction will depend upon the differential, not the absolute, pressure of external ether, and cohesion become gravitation, which we are told is not strong enough to exert the efforts made by the other. This brings us back again to Newton's position, That the two attractions result, if not from different causes, yet from different operations of the same cause. And we may conclude the same of fire, heat, muscular motion and sensation, wherein he likewise suspects ether to have a hand, but it seems to operate differently in producing those several effects : which indicates a kind of choice and discernment not to be found in the motions of matter unless where directed by some understanding ; and this direction it may receive from the action of the mundane soul.

12. But howmuchsoever we may resolve attraction into repulsion, this will not put an end to our enquiries : for repulsion is no more

an inherent property of matter than attraction was. The learned tell us that the particles of ether do not touch but keep one another always at a distance: but it is an established maxim, obvious even to common sense upon a little attentive use of it, that no substance can act where it is not, nor operate upon anything at the least distance from the place where it exists, therefore there must be some medium between the particles of ether pushing them asunder. Thus we shall be reduced to the condition of the indian philosopher who asserted that the earth was supported upon the back of a huge elephant, and the elephant stood upon a tortoise, but what the tortoise rested upon he could not tell: so after having demonstrated that all motions we see result from attraction and that from repulsion, what if we should be asked for the cause of this latter? for a cause it certainly requires as matter cannot exert it by its own energy. We have observed before that there is a prodigious consumption of force every moment occasioned by the collision and pressure of bodies throughout the universe: and where shall we seek for a fund from whence to draw supplies for repairing the continual decays of motion? The shortest way would be to recur to Almighty Power, which certainly does not want efficacy to compleat

compleat whatever is wanted to be performed by it; and I know that how far soever we may trace our chain of second causes we must come sooner or later to the First. But it is the mark of a weak mind to be forward in ascribing events to the divine operation which cannot presently be accounted for otherwise: and the soundest philosophers have made it a rule never to call in omnipotence without absolute necessity. Since then we experience in ourselves a power of giving impulse to matter and there is none of it but must lie within the reach of some spirit contiguous thereto, why need we scruple to believe it liable to the like action therefrom as we exert upon our motory fibres? Thus we may assign spiritual substance for the first of second causes from whose action the repulsion of ether, whence all other material agents derive their vigour, begins; by whose ministry the laws of nature are executed, the continual decay of motion repaired, the world and all things therein are kept in order. Nor will the admission of such a power derogate from our idea of the supreme Being: for since all, both material and spiritual substance, received their existence, their powers and properties from him, and not a particle of either stirs unless by his permission or appointment, they are to be regarded only as

instruments in his hands and whatever mighty works they perform ascribed ultimately to him.

13. As to the force a spirit is able to exert, we have no measure in our own experience to determine it by; for though we can lift heavy weights it has been shown in the former part of this work that we do not this by our own strength, for we receive considerable assistance from our animal circulation: yet we must begin the motion upon some little nerve or fibre to pull up the valve for letting in the vital stream upon our muscles, but what momentum we impart thereto I know of no method to ascertain. Our power must certainly be confined to very narrow limits because the sphere of our presence is so, for as nothing can act where it is not we can act only upon such particles as may be drawn within that compass and consequently can give no greater momentum than those little particles are capable of receiving. Yet for ought we know our strength may be very great in proportion to our sphere of activity nor can we tell what limits to set it: therefore a multitude of us acting together might perform mighty feats upon huge masses of matter: If cohesion depend upon the action of spiritual substance let us consider what weight a bar of iron as thick as the breadth
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of a guinea would sustain, and if the theory of gravitation before laid down be right we have seen how vast a pressure lies upon bodies of the same dimensions: this then will be the force exerted by so much of that substance whose presence can extend throughout the surface of a guinea. And the same force that can hold the particles of bodies so strongly together may suffice to dart them along when detached from one another with a proportionable rapidity: so that we shall not want a cause for the velocity of light, vibrations of ether or other the swiftest motions that human sagacity has yet discovered.

14. If anybody objects that by giving a spirit extent of presence I ascribe it bulk and consequently a consistency of parts; I shall desire him to resolve me two questions, Whether he denies God to be present throughout all immensity, and Whether he conceives him to have bulk or to consist of distinguishable parts? And I shall refer him further to CHAP. IV, V. where I have made it evident, at least to my own apprehension, that we are individuals not consisting of parts, nevertheless that there is a certain portion of space throughout which we are totipresent, because we can receive the action of many corporeal particles at once which can-

not be brought into contact with a mathematical point. Since then we have each of us a certain sphere of presence a multitude of these spheres may extend to any magnitude in proportion to the numbers of them, and the spirits residing in them, having a communication of ideas, will join in exerting their activity throughout the whole magnitude composed of their spheres. Thus though the strength of each singly, by reason of the narrowness of their presence, be very trifling, perhaps scarce able to lift a mote in the sun beams; yet by their united force they may perform more stupendous exploits than Milton's angels, and without the trouble of loosening to and fro, from their foundations may pluck the seated hills with all their load, rocks, waters, woods, and by their bases broad uplifting rear them high in air, or toss with rapid whirl o'er ocean's furthest bourne. For we know the efficacy of union to produce strength out of weakness as well in the works of human industry as of nature. When a number of men are disciplined to act at one signal or obey one command, what masses cannot they move, what performances cannot they achieve! We know of few things weaker than water or more yielding than air: yet what havock and devastation do storms and inundations make by

by the combined force of little corpuscles, thousands of which one might blow away with a breath! How feebly does one grain of sand attract another? so that we cannot discover it by the nicest experiment: yet tis the aggregate of such attractions from all the grains in all the earth that holds down the moon in her orbit. But the mundane spirits, intimately persuaded of the benefit of unanimity and by their mutual participation of perceptions having the same understanding, the same motives and apprehensions of things, enow of them will always be ready to concur in compleating every work that shall be discerned expedient.

15. An objection may be started here against the possibility of our spirits doing the mighty things ascribed to them above notwithstanding their strength and unanimity: for action and reaction being reciprocal and opposite, whenever a spirit goes to impell a particle of matter he will thrust himself backward with equal force, and tho he may have some good friend behind to keep him steady he will thereby impart the same force to him, who will likewise transmit it to the next beyond and so on until the thrust be propagated to the outermost bounds of the mundane soul, which expanding by degrees the parts of it must open and thereby losing their

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contiguity

contiguity with either corporeal or spiritual substance must lose both their percipience and active powers for want of materials to exercise either within their reach. But tho' we find reaction constantly prevailing between bodies it does not necessarily follow from thence that the like prevails between body and spirit, one acting by impulse and the other by volition : nor have we reason to think it does from anything happening to us in our common actions. We feel our limbs move and the outer parts of our body, but we feel no resistance from the inner fibres we employ in moving them : in short we are so little affected by those first instruments of our action and have so little notice of them that Hartley and some others have denied that we ever move them at all but insist upon their being moved mechanically by the vibrations bringing us our perceptions. And this consideration may obviate a difficulty concerning the laboriousness of those tasks we have assigned the mundane spirits in exerting their utmost strength incessantly to produce repulsion, cohesion and gravitation in matter, which may be thought incompatible with that happiness we have supposed them to enjoy. For there is nothing operose or toilsome in volition, our limbs indeed tire upon being over-worked because they can bear no
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more than a certain measure of exercise, our reflections fatigue by a constant repetition of the same ideas because our organs lose their relish and return us uneasy perceptions instead of the agreeable ones they gave at first: but if we can find employment for a fresh set of muscles or bring a fresh set of objects to our imagination we find as much amusement in them as if we had done or contemplated nothing before. The mind is never tired of commanding from morning to night so long as the instruments are not tired of executing; therefore the actions of spirit are always performed easily without either weariness or satiety.

16. As we have supposed all space replete with material or spiritual substance it may be doubted whether in that case there could be any motion of either, because there would be no vacant place for them to move into. But it is the more generally received opinion that spirit is penetrable by body, therefore can oppose no obstruction against the motions of that: and as I never heard it determined even by conjecture whether spirit be penetrable by spirit, it remains wholly uncertain whether they will obstruct one another. But admitting them neither penetrable by one another nor by body, though I have supposed them contiguous I have not supposed them

present in every point of space ; for the waters of the sea lie contiguous yet are there many pores and vacant spaces between them : therefore spiritual substance may be considered as an extreme subtile fluid continually at motion within itself and admitting bodies to pass through it with more ease than fishes swim through the water. But this is offered only upon supposition of their being impenetrable, which I have before declared my sentiments that they are not ; and of locomotion being necessary for them, which is more than I know to be the fact : for as they will have perceptions brought from every quarter they will hardly want to change their situation in order to change their scene and examine objects they could not discern before. But if loco-motion be requisite I do not imagine they can move themselves nor one another : but as we are vitally united to some part of our body which carries us about with it wherever it goes, so they may join themselves occasionally to some particle of matter which is going the way they desire. Nor need it be wondred that the courses of nature should go on so steddily as they do if guided by voluntary agents, some of whom we might imagine would proceed in a different manner from others because we find them do so among ourselves : whereas bodies
gravitate

gravitate and cohere, air condenses and rarefies, light reflects and refracts always exactly in the same manner under the same circumstances. But when we consider that our own contrariety and changeableness of behaviour springs from the ideas starting up in our imagination, which each man has peculiar to himself nor does his neighbour discern or stand affected by them, and that in proportion as every man possesses a more enlarged understanding and judgement we find him more steady and uniform in his conduct, we shall cease to wonder that these spirits whose knowledge by their participation of ideas must extend much wider than ours, not liable to overlook things which when discovered must alter their judgement, should pursue constantly the same tenour of conduct; that what appears expedient to one should appear so to all, and what they judge proper to do at one time they should adhere to at all others without variation.

17. This entire unanimity of sentiment and perfect harmony of action may well warrant us to look upon the whole as one thing, to which the material world will serve as a sensory exciting sensations and reflections and exhibiting ideas, and the spiritual part as a percipient to receive them and a vivifying principle to invigorate and actuate the motions

tions of the other; having in a manner one understanding, one design, and one volition, making all together one compound as the human soul and body make one man. So that with the Stoics we may call the universe an immense animal, or say with Pope, All are but parts of one stupendous Whole whose body nature is and God, not the Almighty but this created god we have been speaking of, the soul. This god or animal or glorified man containing all men (for it matters not what name we use so our ideas be clear) which is the world, will have a full discernment of all his parts with their combinations, proportions, symmetries, situations and uses: nor will anything minute escape his notice, for being not confined like us to one little cell in the brain where we know nothing of the many secretions, circulations and other transactions passing in our frame, but his spirit insinuating and penetrating every where, not an atom can stir without his knowledge and observation. Nor must we imagine him to receive sensations only from all these objects, for as the modifications of our organs furnish us with judgements, relations, abstractions and other ideas of reflection resulting from the notices of our senses, so his sensory the material world will supply him with the like in far greater abundance, free from that disorder

order and perplexity attending them in us, as being selected and purified in their passage through spiritual substance by the channel of communication: so that he will be all intelligence, perfect reason and unerring judgment. And though we must needs admit him passive in perception, he will have such absolute command over the causes and instruments of perception that no thought can intrude against his liking. Yet we must not imagine him subject to those sudden starts and wanton sallies which too often hit our own fancy, for this would occasion strange irregularities in the visible world, but best pleased with that regular scene of contemplation exhibited by the stated laws and steady courses of nature, and therefore constantly employing his activity to execute and preserve them in order. For his activity being co-extensive with his intelligence every limb of his immense body will be under his immediate government, so that all the motions therein will be voluntary; nothing automatic, or at least the automatic be exactly directed by the voluntary; and ether, whose various repulsions are the grand springs of all natural movements, may be considered as performing the office of nerves and muscles in moving the larger members. By his strength he rolls the huge planets along the boundless

boundless sky; by his agility he dashes the light on all sides with inconceivable velocity; by his energy he produces gravitation, cohesion, heat, explosion, fluidity, contraction and dilatation of the circulating vessels in plants and animals, and all other operations discernible throughout the visible world.

18. In him as parts are contained all the powers that men can imagine concerned in the phenomena of nature or affairs of mankind; for we might stile the god or angel of the sun, the god of the moon, of Saturn, Jupiter or the other planets, so much of his substance as actuates their motions and operations, and so much of it as surrounds every particular man may be called his guardian angel or demon: so that by this theory one might almost reconcile the pagan theology with sound reason and probability. Yet I would not suppose the same particles of spiritual substance to attend the moving bodies throughout their progress, but transmit them to others having the same dispositions, purposes and activity, whereby there will be no variation nor irregularity in their courses. For we divide the ocean into seas, gulphs and bays, the waters whereof continually change, so that those which compose the German sea to day may make the British channel

channel to morrow, the bay of Biscay the next day, and afterwards the Mediterranean. And as the wake of a ship, by which I think the failors understand the stream drawn after the stern by its motion, follows the ship throughout her voyage yet consists every moment of different waters: so wherever a man goes he may always have his guardian angel about with him, the same in kind and quality, in character and ability, but not a minute together the same in personal identity. Nor can it be doubted that this spiritual substance, having so minute a discernment and perfect command over the particles of matter, might form them into any shapes or appearances he had a mind; or by throwing our sensory into proper modifications impart any knowledge, even such as could not naturally enter into the human imagination. Not that I mean to decide whether such things have or have not been done, but whoever believes they have may find here a fit agent by whose ministry any commands of the Almighty may be executed, as well ordinary as extraordinary. For without such command, or some very substantial reason, we may rest assured he will not deviate a step from his usual method of proceeding. Therefore we need not fear any fantastic surprizes nor hurts from him; not for the same reason which

secured

secured us against the vehicular people, because they were too feeble to affect any of our senses, for he wants neither skill nor ability to raise dreadful phantoms or rattle chains or terrify us with horrid dreams as well in broad sun shine as at midnight, nor to work all the feats of witch-craft and magic: but because such more than childish pranks are inconsistent with his consummate wisdom and importance of character. To entertain these apprehensions of him would be as idle a fear as if upon our friend of the best credit and character coming into the house we should disturb ourselves lest he might steal a silver spoon or take some fly opportunity to slit holes in our furniture: and we ought to be as backward in giving credit to reports of that kind as we should be in believing anybody who told us he saw a group of persons of the highest dignity and most venerable character playing at taw together in the street, or robbing an orchard, or practising the little mischievous tricks of an unlucky school boy.

19. But as we are perpetually sustained and protected and the springs from whence we receive our uses and enjoyments actuated by the mundane soul, so it may be presumed that we are likewise of some use to him. For embodied spirits, each confined within his several
cell

cell and having no ideas unless what his particular sensory exhibits, must be allowed to operate differently upon the matter environing them from those which lie at large in the mundane substance, and thereby diversify the scene, presenting ideas he could not find elsewhere. For though I do not suppose him contiguous with our spirits, because then we should become one with him and participate of his knowledge, yet he may be so with the outside of our sensories, and by observing the motions there and knowing from what operations of spirit they must proceed he may read our thoughts as currently as we read one another's thoughts in a letter. And if evil be necessary in nature, as we must conclude from its having admission therein, it may be dispersed among the corporeal and vehicular states that the inhabitants of the mundane, by applying to the sensories of the other two, may attain the knowledge of evil without actual suffering. Thus our pains and displeasures, our vexations and disappointments, our errors and follies, which we look upon as oversights or neglects in nature, promote the service of more exalted Beings, doing them more good than hurt to ourselves. Our various constitutions, talents, passions, desires, professions and fortunes, all the transactions and dispensations
befalling

befalling us, which we regard only as they affect our present condition, have a twofold use besides : as they prepare us for our several functions in the vehicular life, and as they present objects wanted for the purposes of the universal soul and whereon his happiness in some measure depends. Perhaps our interests may furnish him with a principal part of his employment, for being compleatly happy and placed out of the reach of evil he may have nothing to desire for himself and nothing to do but exert his power and contrivance in lessening the burthens and enhancing the enjoyments of animal life as much as possible : so that for ought we know the most glorified Beings may be constantly attendant upon the services of man, not for the greatness of his importance, but because he is the only poor creature that wants their cares.

20. Having given the fullest explication I could of that exalted Being the universal soul, the head and principal of creatures, let us now consider how well he may deserve the glorious things said of him in former times. And first we need not scruple to admit him for maker of the world, that is, the agent employed in executing that stupendous work : for penetrating into every pore of material substance, being all intelligence and activity throughout,

throughout, he might discern all the particles in Chaos, if ever there was one, know what they were severally fit for, assort them into elements and of them compose habitable earths. Upon the word given Let there be light, he might twist the sevenfold rays and dart them about in all directions, or upon a second word collect the main body of them into a Sun. He might give the heavy planets their tangential motion by one strong and exactly poised stroke. He might gather the waters from the dry land, having first scooped the capacious bed of ocean and raised the equatorial parts lest the diurnal rotation should cast up the sea above them. He might give the earth a twirl as easily as a child twirls round his whirlagig to produce the vicissitudes of day and night. He might thrust the poles askance twice ten degrees and more that summer and winter, seed time and harvest should never fail. He might draw out strings of viscous juices from the ground, and perforating them into tubes and interlacing them artfully together, compose therewith the tree yielding fruit after his kind and the herb after his kind whose seed is in itself. He might form the dust of the earth into animal organizations with proper members for walking or flying or creeping or swimming as soon as the breath of life should be breath-

ed into them : and extracting the finer particles from the grosser might work them into mental organs and sensories fit for the reception of perceptive spirits who should be created for them to begin the race of men upon earth. And as he went on compleating his task the Lord Almighty looked forth from heaven and saw every handy work of his minister and behold it was very good. The six days formation being ended, though God rested from commanding his agent did not rest from acting : for his reason could now direct him how to proceed in sustaining the work he had been taught to make. He still continued to turn the grand wheel of repulsion, that first mover in the wondrous machine of visible nature, all whose movements follow one another uninterruptedly for ages according to stated laws and in regular courses without failure or disorder in any single wheel. Until the fulness of time being come or the signal given from the throne of Glory, the same agent, turning the wheel of repulsion the contrary way, will rend the mighty fabric asunder, throw the parts of compounds out of their order, dissipate them with a sudden explosion and reduce all into Chaos again. From whence upon a new plan assigned new systems may be formed, new earths

earths stretched out, new vegetables and animals produced to cover and inhabit them.

21. I think offence cannot be taken against our ascribing the generation and sustentation of the world to a created Being, as it seems rather to raise than depress our idea of the divine majesty, and every thing done by the deputy commissioned for that particular purpose is always esteemed the act of the principal. The very expression commonly used that God made all things by his word warrants our supposition of an intelligent agent who should understand and obey the word when spoken; and those writings which speak of supernatural effects many times declare them performed by the ministry of an inferiour hand. It was not the Lord himself but the angel of the Lord who smote the host of Sennacherib: and when a promise is made of peculiar protection to some particular person, it is said that God shall send his angel to direct thy steps that thou hurt not thy foot against a stone. Nor do I apprehend any danger in removing the divine power as far as possible from those operations we see or know of, provided that we bear constantly in mind that all other powers must be referred originally thereto. Therefore how mighty works soever are performed, so long as we can conceive God having a minister in

his kingdom capable of executing them we need not call in omnipotence: reserving only to that the prerogative of giving the powers and lights requisite for obeying his orders and fulfilling his word.

22. The powers and operations of the universal soul being settled we will proceed next to consider his state and condition within himself: and we may agree with the ancient fages in pronouncing him immortal, unchangeable, compleatly intelligent, wise and happy. For having nothing external he will be secure against dangers and accidents from without: being not vitally united to systems of matter their dissolution can affect him no otherwise than a change of objects or of one thing for another taken into our hands does us: and consisting of similar parts whose qualities do not depend upon their order or combinations, he will not suffer by their taking new positions, as we should do upon the misplacing an eye or an ear or any little fibre in our bodies; for every component spirit would be able to perform the same office with that into whose place it succeeded. Or if anything were to happen in his immense body tending to his damage, being active and discerning throughout, he would know how to prevent the mischief in time. The extensiveness of his intelligence communicated

nicated perpetually from every part to every part must render him universally knowing in all the combinations of matter, their situations, order, motions and secondary qualities, together with the judgements, reflections and sciences resulting, or consequences and uses expectant therefrom. All this, together with his exemption from passion and error, must make his wisdom consummate to provide effectually for his own interests and those of inferiour creatures committed to his charge. For if in a multitude of counsellors there is wisdom, how great must the wisdom be of this innumerable host of spirits mutually imparting their lights from all quarters of the universe! Therefore he will act invariably right, doing always that which virtue requires though without any other virtue than that of prudence, because he will want none other. For to us the virtues are necessary marks directing to that happiness we want clearness of sight to discover and strength of mind to pursue: but he having a foresight of remotest consequences and an intuitive discernment of their just amount, will see clearly what is best and need no spur to instigate nor mark to direct him in the pursuit of it. The clearness and largeness of his understanding will secure him against all partial views and unsteadiness of conduct;

for tis folly and ignorance that make us capricious, changeable and inconsistent with ourselves, but wisdom is ever uniform and the same throughout: therefore he will have no variableness in his sentiments, his designs or his measures, but approach as near to the divine immutability as can be conceived possible for created substance.

23. With all these accomplishments and perfections we cannot doubt of his being unspeakably happy; and if any sparks of evil should be sprinkled upon him by contemplation of the miserable wretches in the two embodied states, they would be so overwhelmed with the joys flowing from elsewhere that he would feel no more disturbance thereat than a man having just received news of some great good fortune befall him would feel upon happening to break a china saucer. Nor need we apprehend his being satiated with the sameness of his prospect, having no other objects beside his own immense body to entertain him, with which being long since perfectly acquainted he can make no new discoveries for his amusement. For though pleasure cannot subsist without novelty in ourselves because our bodily organs, losing their quickness upon repetition of the same objects, will not continue the relish they gave at first; yet where the spirits serve as
organs

organs to one another it is not certain the same inconvenience must ensue. But supposing variety of objects and employments necessary to happiness he will not want for plenty of either: for his immense body, the universe, though but one and he have nothing external to gaze at, consists of numberless systems each containing a multitude of under parts whose incessant movements perpetually change the face of nature and exhibit a diversity of scenes as well among the larger members as in the minuter particles. Nor is it necessary that every component spirit should have the whole in contemplation at once; for large as their capacity may be we have never represented it as infinite; therefore their streams of communication may be varied by the pouring sometimes one kind of perceptions upon each other and sometimes another; or they may travel to and fro to visit different regions and take a nearer view of objects that lay at a distance from them before. Add to this that the follies, the passions and miscarriages of embodied creatures will probably furnish them with new scenes unknown to wisdom and dissimilar to anything of her production. Nor need we fear their want of employment to engage them, for considering the vast consumption of motion every where which requires their

continual efforts to renew it, besides the mutual communication of perceptions and choice of those proper to be communicated, they will constantly have enough to do in giving impulse to the matter falling within their reach. For as they do not run along with the bodies they actuate but hand them on to one another, they will have different functions to execute: sometimes busied in pushing forward the corpuscles of light, spreading the tails of comets, or regulating the vibrations of ether according to their proximity or distance from masses of gross matter: sometimes in gravitating heavy weights to earths, or holding the parts of metals in cohesion, or giving fluidity to liquors, or gravitating the particles of fire, or contracting and dilating the circulating vessels in plants and animals.

24. We have heard talk of a beatific vision supposed to constitute or enhance the happiness of disembodied spirits, nor shall I attempt to disprove the possibility of such a supposition, for we know not the extent of our perceptivity. We may be capable of new senses, higher faculties and sublimer reflections than our present organization can exercise. When totally disengaged from the veil of matter enwrapping us we may be able to see even as also we are seen and discern sensibly

sensibly that glorious object which no man can behold and live. But without this extraordinary privilege we may well imagine the universal soul must attain a compleater knowledge of God than we can though by the same way that we do, namely by the contemplation of his works. For having the whole book of nature constantly open before him and by the largeness of his understanding and mutual communication of perceptions throughout his substance being able to comprehend the spacious pages at one glance, he will read there the whole divine œconomy, discerning the uses and wisdom of those parts which to us appear superfluous or mischievous and forming a clear conception of the divine attributes, not excepting those unknown and unscrutable to man. Nor will it lessen his adoration to know, as from the account herein before given it may be inferred he must know, that nature is the work of his own hands and the regularity of her courses carried on by his own energy: for as a man who has done extraordinary things, if he thinks justly, will derive from thence a greater veneration for the power which gave him the sagacity and talents enabling him to perform them: so the universal agent will always bear in mind that he is but a minister and instrument in the

the hand of a superiour upon whom he continually depends. For if God were to withdraw his material world for a moment the spiritual would instantly lose its percipience and action, having neither object to discern nor subject to act upon nor means of communicating perceptions where none were excited. Nor can he forget that how well soever he may continue the order of succession in the courses of nature, his operations must have had a beginning, his intelligence some premisses furnished for it to work upon, and there must have been some original order and position in matter to be the basis and foundation of his resolutions before he could make or act in pursuance of them. The existence of evil, which proves to us a stumbling block, would teach him a usefull lesson, for we may presume he would not admit it willingly in any part of the universe under his care: but the necessity of its being scattered somewhere must convince him that he is not omnipotent but under controul of a higher power by whom that necessity was imposed. And if the courses of nature are sometimes to be changed, new systems to be formed, he will perceive modifications in his sensory directing them, thoughts and designs occurring there which he did not introduce himself. With all this we cannot doubt of his
having

having as full an insight into the divine nature as is possible or requisite for created Being : he will find no perplexities in his ideas of the attributes nor appearance of their clashing one with another : he will clearly comprehend the nature of infinite goodness and be able to reconcile the permission of evil therewith ; therefore will apply himself heartily to every task assigned him, well knowing that all are calculated for the benefit of the creature. He will be so intimately penetrated with the idea of the divine equity that there will arise no opposition nor struggle for preference among the component parts of his substance : for each discerning that no hurt can befall another but what must redound to his own damage the general interest will actuate them all and self love become benevolence. That sole virtue which accompanies us in the last stage of our existence, when the persuasions of reason shall be lost in intuition and the expectation of future good swallowed up in the fruition of present.

25. This host of happy spirits called by one name, the universal soul, from their uniformity of action and sentiment, we suppose the receptacle for particular spirits as they can disengage themselves from their vital union with matter, and that upon disruption of a vehicle the perceptive inhabitant will be discharged

discharged therein and incorporated therewith : whereby the communication with spiritual substance being opened it will instantly partake of all the knowledge and designs of of its neighbours and immediately take its share in their operations according to the station wherein it happens to fall. And tho' leaving the traces of its former memory behind, it will have the records of the universal sensory to inspect wherein is preserved the remembrance of events happening throughout nature more exactly and fully than can be comprized in any animal organization. Thus in this state there will be no infancy nor growth of faculties or advancement in learning, but the new comers upon their first arrival will stand upon the same footing with the old members as if they had resided among them from everlasting. As they act in concert carrying on one plan of operation the act of all will seem the act of every one and each feel a kind of consciousness of what is performed by the whole company. For as among men concurring heartily in one undertaking all claim the credit to themselves, the majority at an election exult as much as if the choice had depended upon their single votes, and a tradesman at a coffee house triumphs in a victory and thinks himself entitled to say We have beat the enemy, because
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he pays some trifle towards the supplies, or is a member of the nation whose quarrel it is; so the members of this mighty agent, the universal soul, altho singly feeble, will partake in the joy of those stupendous works carried on by their united strength. For all contributing their activity to roll the celestial orbs in their appointed courses, to diffuse light throughout the vast expanse, to keep the elements in order, to distribute all things upon earth by number weight and measure, to produce and preserve the several species of plants and animals, to direct the affairs of men and turn the wheels of fortune, to fulfill invariably the Will of God and execute the mighty plan assigned them, the pleasure of the performance will redound entire to every one as if he had been the sole agent employed.

26. With all these sources of enjoyment the contemplation of universal nature, the science of all operations as well in the largest as the minutest bodies, the possession of an enlarged understanding and perfect reason, the assurance of an immortality and unchangeableness of character, the constant occupation without labour or difficulty in the most magnificent delightfull and important works, the consciousness of acting invariably right and the clear conception of the divine attributes, we may well admit this the happiest

piest state created substance can be placed in, therefore we need seek no higher but may take this for our idea of the kingdom of heaven. In that kingdom almost everything is the very reverse to what we find it upon earth: here we live single spirits vitally united to unwieldy masses of matter which but ill perform our services, for most of the parts of our composition lying out of our notice we have no command over them, their motions are for the most part mechanical and automatic, nor can we prevent diseases and disorders from gathering among them nor passions, habits and thoughts cast upon us involuntarily from them, we depend upon things external for our uses and enjoyments and the sustentation of our bodies, therefore are liable to continual wants, disappointments and accidents. There the spiritual substance being diffused every where has no more of matter to deal with than it can manage, directs the movements of every limb and fibre in his immense body, which containing every thing requisite for his uses and enjoyments within itself, and being subject to no decay, needs nothing external; and each corporeal particle by the communication of perceptions serves the purposes of many spirits. Here we have the whole portion of actual evil distributed among us in all its various forms of pain, disease, disappoint-

disappointment, vexation, trouble and uneasiness: there they have only the idea of it, which perhaps they find necessary to their happiness; for perception being transient and momentary and probably not excited without some motion in matter, if they had not an apprehension of damage to ensue upon their forbearance they would have no inducement to exert themselves in giving those motions to bodies from whence they receive all their perceptions. The narrowness of our views occasions private aims and contrariety of interests, so that half our cares are laid out in opposing one another's designs, whereby much of the power we might have is lost: but they using one common understanding proceed with perfect harmony so that their strength, though singly far inferiour to ours, becomes immense by their unanimity. We follow the gratification of our desires thinking of nothing further, and God works out his own purposes from them giving an issue to our endeavours contrary to what we intended: they keep their eye steddily fixed upon the Will of God which it is their constant desire and delight to fulfill, therefore as nothing can happen anywhere contrary to that Will, nothing can happen contrary to their wishes. We labour for the most part to serve ourselves, not much regarding what ensues

ensues therefrom to our neighbours, nor can we do otherwise in many of our actions wherein nobody else has any concern: they pursue always the general good so that love, pure judicious love, actuates all their motions, displaying itself in a cordial obedience to the fountain of blessings and sincere attachment to one anothers interests.

27. This spiritual community being heaven and all space not occupied by matter being replete with spiritual substance, it follows that heaven is not local but every where all around, above, below, on each side and within us, filling not only the starry regions but likewise the air, the earth and the seas, and permeating the pores of all compound bodies. Therefore that we are out of heaven is not owing to any distance we stand at from thence, but to our being pent up in walls of flesh which cut off our communication with the blessed spirits and shut us out from all participation in their lights and their joys. We are like persons inclosed each in a sentry box having all the chinks and crannies stopped that might let in the least light or sound, and in this condition set down among the splendid throng in a full Ridotto: they would be alone in the midst of company as knowing nothing of the gaiety and diversions passing round them. If they had strings reaching

reaching to one another's boxes they might make signs by them, learn in time to understand one another's motions and carry on a sort of conversation together, but very imperfect in comparison of what they could do if let out and permitted to converse like other people. So we while imprisoned in these earthly tabernacles see little and know little of all that passes around us, and converse together imperfectly by the corporeal mediums of sights and sounds. Upon the dissolution of this gross body we may find an inner integument still clinging round us, but when the appointed time shall deliver us from this too we shall not have far to travel before we join our company: for wherever our vehicle leaves us there we shall find heaven, and take our place and occupation therein immediately without any of that surprize or awkwardness or agitation usually thrown upon our corporeal organs by scenes wholly new, but with the same readiness and familiarity as a man coming off a journey having his own house, his own family, his own furniture and conveniences about him; for we shall then understand and apprehend, not by our old ideas, but by those of the universal mind, and partake in the expertness and full digested remembrance belonging to that.

28. Though this notion of the mundane soul was first broached by the old philosophers I hope the moderns will not be offended with me for attempting to revive it, since I have brought it at least to my own thinking compatible with some of the most important articles now received among us. For one cannot well imagine a more intimate communion of saints than that above described: the exemption from evil implies a release from punishment and full forgiveness of sins: the unchangeableness and immortality of this soul are but other words to express a life everlasting: our incorporation therein, whereby we shall have the whole frame of material nature to supply us with objects and serve as instruments for us to act with, may be reckoned a resurrection of the body; for tho' this body were existent before yet we may be said to rise again upon our admission into it by being restored to our percipience and animal functions. Indeed the vehicular state is a resurrection too, therefore that may be reckoned the first, or resurrection into the kingdom of Christ, and this of the mundane state the second, when he shall deliver up all power to the Father; and whereas we are taught to expect a spiritual body on our rising again, we cannot thereby understand one composed of spirit, for that were a contradiction

dition in terms, nor can any material composition better deserve such epithet than that whose every member, limb and fibre is actuated by spirit. As to the vulgar notion of a resurrection in the same form and substance we carry about at present, the various ways in which it has been expounded and many difficulties raised upon them all sufficiently declare it untenable : and the reason ordinarily given, because the body being partaker in the deed ought to share in the reward, as well requires a resurrection of the sword a man murders with or the Bank note he gives to charitable uses ; for our mind is the sole agent, and our hands are as much the instruments as anything we hold in them. But since the mind can neither perceive nor act without matter, there must be a resurrection in some sense or other, that is, a re-instating in some composition answering the purposes of a body to render her capable of another life. Lastly, the occupation proposed for us there is the glorifying our Maker, which cannot better be performed than by steddily fulfilling his Will, constantly attending his services, carrying on his appointed courses, executing his laws of nature and heartily concurring in his beloved work the general good and happiness of his creatures. This seems a more acceptable praise than singing hymns

and psalms to all eternity: for obedience is better than sacrifice, and to do the Will of God than the fat of lambs.

29. I know of but one exception can be taken against the idea here given of heaven, which is, that it leaves no room for the blessed spirits to differ in their degrees of happiness as one star differeth from another star in glory. But since the communication of perceptions which constitutes their happiness is voluntary, who so pleases may suppose them communicated in greater or less measure to every one according to his deserts, as we give more or less countenance to different persons in the same company according to our esteem of them. Yet it being customary to consider no more than one world besides this sublunary and to speak promiscuously of the intermediate and final states, I should rather choose to interpret whatever is said of the different degrees of happiness as relating to the former, than admit a partiality and particular favour among the most perfect of created Beings.

30. I have now offered what I can conceive may be the condition of our intermediate and final states after we shall leave this world and be seen no more. My intention herein was to give a livelier idea of some important truths which I think discoverable from our observation of nature and knowledge

ledge of the Divine Attributes than could be entertained while they remained in abstract and general terms: namely, that there may be life, enjoyment and action out of this body; that there are other Beings to whom what appears useless to us may be serviceable; that there is a connection of uses and interests throughout the whole creation; and that whatever befalls us here, though seeming nugatory or hurtfull, will turn to our account some time or other. So far as any one shall find what I have here suggested answer this purpose and impress stronger upon his imagination or display in more sensible colours what he knew before to be true I shall be glad he will attend to me: for I did not propose it as an article of faith, and pretend to prove nothing by hypothesis, nor am so wedded thereto but that if anything therein shall be made appear contradictory to the judgements of sound reason or hurtfull to the mind or good manners, I shall be the foremost to reject it.

C H A P. XXIII.

T H E V I S I O N.

*Speciosa dehinc miracula promat,
Antiphaten, Scyllamque, et cum Cyclope Charybdin.*

ONE day after having my thoughts intent all the morning upon the subject of the two foregoing chapters, I went out in the evening to a neighbour's house to recreate myself with a game at cards. After some time spent in this amusement we sat down to supper, during which, according to the english custom, we began to settle the affairs of the nation, particularly that important point now in agitation, a Spanish war, whereon we could not come to a satisfactory determination. For though we depended upon the valour of our fleets and armies to take Portobel, Carthagene and the Havannah at one campaign, we could not be sure that would end the war, and were a little doubtful how long we might be able to continue raising twelve millions a year and conveniently pay the taxes necessary for the interest of such enormous sums. Under this difficulty,

ty, and finding that our own politicians could not agree, we wished for some of those to extricate us of whom we had read wonders in former times, the Godalphins, the Burleighs and the Walsinghams: and some of the company, who held that mankind degenerates every age as well in bodily strength as in mental sagacity, wanted to conjure up the souls of Julius Cesar or Philip of Macedon. This latter thought turned the discourse upon necromancy, and leaving the national concerns, which we believed would go on full as well without us, every one fell to consider how he might best gratify his curiosity if he were possessed of that art, what persons he should evoke from the shades and what questions he should put to them. One was for seeing his relations and friends again, another for a tete a tete conference with Elizabeth or Mary of Scots, others for calling up Belisarius, Cicero, Archimedes, Alexander and the heroes of antiquity: till I happening to say I had read somewhere that Socrates learned to play upon the fiddle at threescore, that Plato made love verses in his youth, and putting them in mind that they had all heard how Orpheus used to draw the trees and beasts after him by his music, the ladies declared they should be vastly delighted to hear a solo on the violin by a philosopher,

pher, or hoped his scholar would accompany him with an amorous sonnet of his own composing, and that the entertainment might conclude with a dance of forests full of lions, bears and tigers to a jig of the Thracian harper. Being thus drawn to think of the ancient sages we proceeded to some of their peculiar doctrines, wishing to hear them explained by themselves, as likewise to know some particulars concerning their occupations and manner of living in the regions where they now inhabit. With conversation of this kind, partly serious but mostly jocose, we passed the time until the company parted, which they did pretty early, some of them having a great way to go. When I came home, finding it not my hour of bed time and being unwilling to fatigue my spirits with anything that might be called study, I walked to and fro in my chamber giving my thoughts a liberty to run as they listed. I found ideas start up promiscuously from what I had thought of in the morning or heard in the evening, each introducing the next by any slight connection in that transient variety and wanton assemblage customary with imagination when judgement throws the reins upon her neck. In this manner I continued to be amused while undressing and until laid upon my pillow: when having neither cru-

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dities nor crying sins nor debts nor hopes of preferment nor schemes of cajoling a county or buying a borough to break my rest, I presently fell fast asleep.

2. I cannot tell how soon afterwards it happened, but methought something broke on a sudden in my head, in the manner I have heard described in an apoplectic fit. Instantly I found my limbs and all my outer parts benumbed so that I had no feeling in them, yet I had still a feeling of my muscles whose motions I could distinguish plainer than before: for I could perceive myself swell them in thickness and contract them in length thereby drawing the tendons fastened to them, but what these tendons drew I could not perceive having no knowledge of anything beyond. But this lasted only for a moment, for the muscles quickly lost their feeling too and I could perceive no further than the nerves or strings of bladders by which I injected a subtil fluid into them. Thus my sence seemed gradually to retire inwards and as it withdrew sensation seemed always to reside in the extremities of those parts wherewith I still retained a connection and to convey notices from them which it had not done while it had any to convey from others beyond them. Just as a man straining to look at a distant prospect overlooks things close before him,
but

but if clouds intercept his sight from the remoter scenes his eye contracts and presents him with a distinct view of those lying nearer. At the next step my perception was confined to the valves closing the orifices of my nerves, which I could open and then feel the animal spirits rush in like the stream of a river when one pulls up a floodgate. At length I found myself reduced to my sensory, where I could discern ideas of reflection and abstraction like pictures hanging round the walls of a room; or rather like those machines shown about for a sight where the images continually change their places or vanish and others are made to start up by unseen springs: but I had not leisure to observe their motions for the whole of what I have related passed in less time than I have been relating. The last thing I perceived was that I seemed clinging to something hard like a stick much in the condition of a man who hangs by both his hands clasped round the bough of a tree, only with this difference that the bough I clung to moved with a prodigious swiftness and dragged me along after it. Not liking to be hurried on I knew not whither with such impetuosity I let go my hold, when instantly the stick slipping away left me behind utterly destitute of all sense and perception whatever.

3. How long I remained in this state of total insensibility I know not but was first roused out of it by something brushing along nimbly by me: I felt it touch me gently as it passed sometimes on one side and sometimes on the other. These sensations set my ideas afloat again and though they appeared very obscure and confused, like those of a man not half awake, I had discernment enough to persuade me that I was now a defunct: that the stick I had clung to was that part of my human composition whereto I had been vitally united which, as I afterwards learnt, being carried on with the annual motion of the earth after the rate of about nine hundred miles in a minute, had departed from me upon my quitting my hold: or in other words that I was actually departed into the other world. I rejoiced however to find I still retained my existence and perceptivity, and having been piously educated cast up a short but fervent ejaculation to that power who governs both worlds, with an assured confidence of his being alike able and willing to provide for me in this as well as he had done in the former: but knowing that we have no title to expect assistance until having done the best we can by our own strength I resolved not to be wanting to myself; for I presumed my activity remained with me too but

but how to exert it was the question, for I knew of no limb or organ of sensation belonging to me nor could find any muscle or instrument to act with. However, I determined to use my endeavours, and believing that the brushes I received were to be the first rudiments for laying the foundation of my future understanding, I made one strong effort at random with an eager desire of catching hold of whatever occasioned them that I might feel what it was made of. Immediately I seemed to stretch out a hundred arms all around me, but with no better success than a man who should thrust his arms out at window while the bricklayers are sweeping down tilesherds, brickbats and pieces of mortar from the gutters above him : for I felt my limbs knocked about incessantly by a shower of hard balls which besides hurting me grievously turned me round and round by the violence of their strokes as a chaff is whisked about in a whirlwind. This made me the more earnest to grope about for some stay which might keep me steady, but the more I strove the worse it proved, for no stay could I find. I don't know what might have been the consequence if I had not presently perceived something hold me and draw me aside from the troublesome stream of bullets : but as some of them still struck against my

my

my fingers I judged it prudent to draw in my arms and give myself up to the management of my new protector.

4. I now lay quiet and easy a while well pleased to find I had no bruises remaining and that my blows smarted no longer than just in the instant of striking: but soon a new desire started up in my mind of seeing what it was that took so friendly care of me. As I did not know whether I had any eyes nor where they lay, I cast my attention every way in hopes of finding a peep hole: upon this effort I presently saw little flashes of light sparkling and vanishing again on all sides of me, together with various objects but all indistinct: being now satisfied I had the faculty of seeing I attributed the little use I could make of it to my own hurry and want of management, so resolving to proceed with more calmness and caution I confined my endeavours to a part near that that I was held by. After repeated trials I found I could form a set of optics, but they would return back again almost as soon as I had thrust them out; till by a little further practice I learned to keep them steady so as to observe anything before me. I then beheld a kind of sack or bag filled out like a bladder with air, uniform every where excepting that from one place there came out the arm
which

which held me and from another a longish neck with a head upon it having a meagre lank-jawed face very like the prints I have seen before some editions of Locke's works. It looked upon me stedfastly with a mild and benign aspect and the lips moved as in speaking. This made me quite impatient to hear what was said, but I was as deaf as a post: however, having already found myself provided with hands enow and eyes enow I did not despair of finding plenty of ears too if I could but tell how to open them. My whole attention and desire being now bent upon hearing, my eyes sunk in directly and left me in the dark, but I heard a confused jumble of whispers, short, broken, and inarticulate at first, yet that did not discourage me, believing I should manage better by degrees as I had done in the use of my sight. Accordingly I could soon distinguish my own name repeated, which surprized me agreeably to find I was among friends. How's this! thinks I to myself, that the retired Ned Search, scarce known to twenty people in the other world, should be so well known here that the first person he meets accosts him by name! It must certainly be some old acquaintance whose face I have forgotten departed hither before me. Sure it can never be really John Locke himself sewn up
here

here in a sack for his sins, for he died before I was born. After this soliloquy reflecting that the more haste the worse speed I moderated my impatience, and observing my motions carefully and minutely it was not long before I formed a compleat ear with drum and every thing requisite for the auditory function.

5. My good friend perceiving me prepared for an audience addressed me as follows. Welcome, Ned Search, into the vehicular state: you are in the hands of one who is not an utter stranger to you tho' not your contemporary: for know that I am John Locke with whose writings you are not unacquainted. I have observed a faint resemblance in your way of thinking with mine which, tho' mingled with a great diversity of character, has given me a family kindness for you. I was apprized of your being to make a visit here and came this way on purpose to assist you. I have already given you a seasonable relief when you were tossed about among those flying balls yonder, and am ready to do you further service in any way you shall want. Consider you are but a baby just born into this new world and may find it expedient to put yourself under some tuition.---It is natural to suppose I wanted very much to thank him for his kind assistance and offers
of

of continuing it ; and to declare my willingness to submit to his guidance until he should teach me how to manage without giving him that trouble ; but I knew not how to express myself. The business now was to attain the use of speech, which I no sooner attempted than I felt myself hung round with mouths and tongues innumerable. I was yet so inexpert in my faculties that I could exercise no more than one at a time ; if I went to look I could hear nothing, if I listened I could see nothing, and now I tried to talk I could neither see nor hear : so wanting the guidance of my ears to direct me in the formation of my words, I strained all my mouths to make as much noise as possible that I might be sure of being heard ; like those disputants who make up for their want of sense by their vehemence of vociferation. After some little time spent in this violent exercise I returned to listening again, for suspecting my pronunciation might be somewhat defective I did not doubt my good tutor would set me right. I heard him laugh most immoderately, and when his mirth was over, Prithee, Ned, says he, what didst make those hideous mouths at me for ? If you could have seen yourself you would have been frightened. Why you made a worse figure than the picture of Fame in a folio Virgil.

Virgil. I guessed at your meaning by your gaping, that you wanted to speak to me, but not a single sound did you utter. Don't you consider that though you do not want for tongue, you have neither lungs nor respiration, and without breath the other organs of speech are useless. We do not talk by the mouth in this country, and if I showed you one in my face it was only to put you upon exerting yourself by exciting a desire of conversing with me, because I knew you had no notion of any other way of speaking. Look at me once more and observe how I manage: but contrive if you can to hold out an ear at the same time, for else you will not believe but that I play you tricks.—I endeavoured to do as I was bid and as use makes perfectness, after two or three unsuccessful trials, I learned to see and hear together. I then saw his face had no mouth nor opening below the nose but from thence downward was all enormous chin: nevertheless I could hear him speak distinctly. I took notice indeed that his voice was something different from the human, having a little twang like that of string music.—Nay, says he, don't stand staring me in the face, you'll learn nothing there: look down upon my vehicle.—I did so, and observed little fibres bouncing up with great strength and

agility in a kind of net-work consisting of various shaped meshes. I can liken them to nothing so well as the little wrinkles continually changing their form in the skim on top of warm milk set in the window to cool, only they moved much quicker and with a more tremulous motion. — There, says he, that is our way of talking: now try if you can copy the file.

6. I tried and tried again with might and main but all to no purpose, for tho I found myself all over in agitation like a Quaker when the spirit pours plentifully upon him, yet not a single sound or whisper could I get out: so that I began to despair of ever making progress in this new fashion string language. My good patron saw my distress and laid a little innocent plot to relieve me. Your strokes, says he, are too gentle and have too long intervals between. Don't you know the strings of a harpsichord will shake a long while after they cease to give any sound? such feeble quiverings will do no good: you must make your pulsations a great deal stronger with nimble jerks following instantly upon one another. But I find you don't care to exert yourself: nay if you grow idle I must take another course with you. — On a sudden his head changed to the form of a lion's with great gaping jaws full of monstrous phangs,

phangs, and he shot out twenty paws armed with claws pointed as sharp as a needle. I was horribly frightened at this unexpected freak in a friend and philosopher, which I took for a fit of phrensy that had seized him. But not knowing how either to get out of his way or defend myself, I exerted all my strength and cried out O! with a more violent scream than that wherewith Belinda rent the affrighted skies when the rape was made upon her lock. Very well, says he with a smile having instantly resumed his human benign countenance, now we have broken the ice we shall go on swimmingly, I did not intend to hurt you: don't be angry with me for frightening you into a scholar when I could not make you one by instruction. But do me the favour to try whether you cannot repeat your O without being in a passion: you need not bawl it out quite so vehemently as you did just now.----My terror had left so strong an impression upon my fancy that I had a clear idea of every little motion it had occasioned within me: with this help I found I could say O in cool blood as often as I pleased, and with as careless a tone as a very polite congregation, while adjusting their dress or thinking of their routs, when that little particle occurs in the responses of the litany.---
Courage! my boy, says the preceptor; now

you are perfect in O we shall soon teach you A, E, I and U: but mind me child, you must ply close to your lesson and follow my directions, they will make your learning the easier.---Ay, thinks I, that I shall with a willing mind, for I long mightily to be asking you questions. ———

You know, continues he that our faculties assist one another: therefore try now to thrust out a neck and head with a pair of eyes and ears to it that you may see yourself speak.---- I obeyed orders and turning my face downwards saw that I was made just like my neighbour, both like two tortoises only inclosed in bags instead of shells. I did not think of amusing myself with brandishing arms and legs about, for being overjoyed at having recovered my speech though as yet consisting only of one simple sound, I kept plying my O's with great delight in all pitches of voice from the highest to the lowest, all the while diligently watching the little fibres as they jumped and vibrated upon my skin.----Bravely done! says Locke. Why, you perform as dextrously as if you had served an apprenticeship: tis not every body can bend his neck so easily the first time. This is an advantage attending us who have used ourselves to reflection, for most of those who come from the other world have a great stiffness

ness in their necks, they can see anything sooner than themselves. But since you have such a facility at retrospection I would recommend to you to pull in your head and examine what passes within your vehicle while you perform any of the functions you are already master of.-----By following this admonition I discovered that my bag or case was lined all over on the inside with little hairs like the nap of velvet, which were the first instruments for me to act upon: for by squeezing any one or more of them, as one squeezes the kernel of an apple between finger and thumb, I could shoot them out, and in this manner performed all my actions; and I observed that many of them produced no external motion but served only to present me with ideas of reflection. But my discovery of such a multitude of springs I had to employ subjected me to one inconvenience: for those of different uses being promiscuously intermingled together and every use requiring several of them to concur in operating towards it, I made frequent mistakes by touching the wrong springs. If I went to stretch out an arm, I should sometimes loll out a long tongue; if I wanted to form an ear, I should kick with a foot; if I endeavoured to look earnestly at an object, I should find a mathematical problem start up in my
I 3 imagination.

imagination. So I resolv'd to have recourse to my instructor to teach me the proper command of my faculties, and I did not doubt but he would begin with that of speech which was what I wanted most earnestly to attain.

7. It would be tedious to relate all the particular lessons he gave me, let it suffice to say that he proceeded much in the same manner we teach children to read, instructing me first how to form the sound of letters, then syllables and afterwards words. But I found the most difficulty with diphthongs, vowels preceeding one another, and syllables having as much vowel as consonant I could not say Chariot nor Extraordinary, but Charrit and Extodny, like the ladies, nor Beloved or Moveth, but Blovd and Moves, like most young parsons in reading the exhortation: nor could I presently get the knack of joining my words into one continued sentence, for in my first essays, making a kind of stoccato music, there seem'd a stop between every sound; so he was forced to begin with sentences that we should account the most harsh. The first he tried me upon was that line of Aufonius, Sic mihi nux, nox, nix, nex fuit ante diem: then we went to Drayton's-court of Fayrie, Hop and Mop and Drop so clear, Pip and Trip and Skip that were to Mab their sovereign ever dear,

dear, her special maids of honour. Fib and Tib and Pinck and Pin, Tick and Quick and Jill and Jin, Tit and Nit and Wap and Win, the train that wait upon her. But he brought me pretty soon to Pope's harmonious versification, While melting music steals upon the sky and softened sounds along the waters die, Smooth flow the waves, the breezes gently play, Belinda smiles and all the world is gay: then to the Italian of Tasso, Ed al pavone spiegar la pompa de l' occhiute piume: Virgil's Avertens rosea cervice refulsit, ambrosiæque comæ divinum vertice odorem spiravere; pedes vestis defluxit ad imos, et vera incessu patuit Dea: and lastly to some flowing greek words, as Genet argurioio bioio, and Met okeanoio roaon.

But, says he, we have another language among us we call the Sentient, in distinction from the Vocal wherein I have been speaking to you. This is carried on by applying our vehicles close to one another and raising certain figures or motions on our outsides which communicate the like to our neighbour and thereby excite in him the same ideas that gave rise to them in ourselves, making him as it were feel our thoughts. This is a much completer way of conversing, being not liable to misapprehension provided the recipient takes care to remove all his own ideas that

none of them may confound or interfere with those delivered : but to do that effectually requires great dexterity and long practice, therefore I will not attempt to teach you. You have gotten our language and that may serve your purpose while you stay here, so you be carefull to employ it well.

8. It is easy to guess what was the first use I ought to make of my voice as soon as I had attained a competent skill in the management of it : the polite Reader's own imagination may suggest better than I can relate what fine speeches I made to thank my benefactor for the pains he had graciously bestowed upon me, to express the joy I felt on hearing that I had a particular share in his favour, and to assure him it should always be my utmost ambition to improve those features wherein he was pleased to say I bore him some faint resemblance.-----Truce with your compliments, says he, we deal but little with that coin in this land of sincerity : we find an immediate pleasure in doing a good natured thing, so want not the spur of applause to instigate us : we follow virtue for its own sake, that is, for the secret complacence of mind constantly attending it. But lest you should think the liking I have taken to you only a sudden fancy that may wear off again presently, be assured I look upon you as a relation.

relation. You know I had no children upon earth.---I beg pardon, says I, for interrupting you : but tho you left no issue of your body you had a more prolific head than Jupiter, for he brought forth one single Minerva but you have a most numerous family : the whole body of sound reasoners in the nation I came from, of which I should be proud to be admitted an unworthy member, derives from you.----He smiled at this conceit. No, no, says he, tis not that way I make out the kindred ; I trace it from a higher stock : tis but since your arrival here I consider you as my child, before I regarded you only as my cousin. I had no descendants below, and we being here Isangeloi, without marriage or sex, have no means of raising up any. Such of us as stand so circumstanced, especially those who have been tired out with the comfortless state of an old batchelor, provide themselves families by adoption, wherein we commonly choose among those of the same lineage with ourselves : for similitude of sentiments conciliates affection, and it has been observed in the race I am going to speak of that the same turn and disposition of mind, runs through the whole line.

You must have read that in the early ages such as applied themselves to the study of nature were reputed conjurers by the vulgar, thought

thought knowing and expert in every thing and dignified with the appellation of wisemen: not that they ever assumed this title to themselves, as being more sensible than anybody how little human science deserved it, but they could not help what other people called them. At length Pythagoras prevailed to have the name of wiseman changed into that of admirer of wisdom, by which he intended to take upon himself the character of a person assiduously employed in the search of knowledge without ever pretending to have attained it compleatly. Thus he became the founder and father of Philosophy, and his descendants for a while preserved the same tenour of conduct and temper of mind; always inquisitive, always improving, sensible their greatest wisdom lay in the knowledge of their ignorance, and unfollicitous to conceal it. But in process of time another set of persons mingled among them, whether really of the family but tainted with a corrupt mixture of foreign blood, or whether a spurious issue gaining admittance thro the negligence of the heralds. These folks, finding how great submission had been paid to the Ipse dixit of the founder and from thence supposing he delivered his doctrines as oracular truths never to be controverted or examined, thought to prove themselves his offspring
by

by an air of positiveness and self sufficiency: so they set up for oracles too, issued their *Ipse dixits* like the edicts of an emperour, and reassumed that claim to wisdom which he had taken so much pains to reject.

From thenceforward the family became parted into two branches, the Searches and the Knowals. The former, retaining the spirit of their ancestor, were perpetually searching after knowledge without ever thinking they had enough, pursuing always the usefull rather than the curious or regarding the latter only as it might be made subservient to the former. Diffident of their understanding they examined their premisses carefully before they built upon them and submitted their deductions to a review upon proper occasions: and though despairing of absolute certainty in anything, they wanted not moral assurance to keep them steddy in following the best lights of their judgement. In their intercourse with others they were docible, humble and modest, willing to learn of anybody and ready to communicate what they had were it ever so small: desirous of reputation only as it might gain them the better hearing, wishing to be believed no further than as they could offer reasons convincing to the hearer: lovers of unity and reconciliation rather than opposition, striving to interpret a different opinion so as to bring it

it compatible with their own rather than to overthrow it.

On the contrary the Knowals, confident in their abilities, soon thought themselves masters of whatever they undertook : they scorned to examine their principles minutely as betraying a want of genius and penetration, so they commonly took up their tenets at hap hazard and then pleased themselves with showing how dexterously they could maintain them ; more solicitous to gain the applause than promote the benefit of mankind : assuming, peremptory and overbearing, proving every thing by demonstration or expecting their word should be taken in lieu of demonstration : impatient of contradiction themselves and delighted to overthrow all who but seemed to differ from them. This branch produced the Sophists of Greece, the Academics of after times who would maintain the pro and con upon any subject proposed, the schoolmen and popish doctors in the dark ages of Christianity. According to the humour of the times they lived in they would bragg of being skilfull in all arts whatever even to making the shoes upon their feet and ring upon their finger ; or of running ye off two hundred lines while they stood upon one leg ; or of writing a gallop and furnishing sheets for the press faster than they could be printed off. In modern days there have been two offsets
sprung

out from them : the Methodists, who pretend to know the secrets of Heaven and deliver all their fancies with a Thus saith the Lord : and the Freethinkers, who though sole masters of reason, do not use it for the information of mankind but only to pick holes in the works of others, and if they can make themselves laugh esteem it the same as making an adversary submit.

The Search branch, not fond of putting themselves forward, have scarce ever composed a visible Church, but lie dispersed up and down minding their own business quietly according to their several talents and stations. To this branch belong those who have made any real improvement, not only in philosophy, but in any art or science conducive to the benefit of mankind, and those who, wanting ability to strike out improvements of their own, endeavour fairly to understand and make a good use of those imparted to them by others. For many of the Searches have very moderate parts, but then they do the best that is to be done with them : on the other hand we often find shining talents among the Knowals, but then they seek no more than to shine with them, and tis well if they do not turn them to mischievous purposes.

9. As I was a Search myself tis natural for me to favour my own relations, and I need not

not use flattery to persuade you of your being one: for tis not brightness of parts nor extensiveness of learning but an honest industrious temper, a cautious freedom of enquiry, a sobriety of mind, an humility of disposition that characterize our line. If I had found no other mark I should have known you for a true Search by the pliability of your neck. The Knowals have a wonderfull stiffness in the vertebræ, therefore they judge of their size by the noise they make, and having most of them pretty loud voices they despise the rest of us as so many pygmies. Pray now did not you fancy yourself bigger than you are before I made you thrust out a head to look? ---Very true, says I, and I wondred how such a shrimp as you could dragg about such a great carcass as mine: but that was not the first time I have found the benefit of retrospection. When I first set out to pursue the light of nature I thought myself a stout fellow capable of mighty things, till having thrust out half my body and surveyed my person exclusive of the cloathing I found it strangely dwindled into a button.---If you can contrive, says he, to work a few golden threads into your button it will be better worth than a bladder full of air.

But to speak my mind freely, you have worked up your button in a manner not very suitable

suitable to my taste: you have a great many more flights than ever I pretended to. I should never have thought of likening the human machine sometimes to a mill, sometimes to a study hung round with bells, sometimes to a chamber organ; nor of proving by a chess board that the sphere of a spirit's presence is wide enough to contain sixty four particles of matter, nor of computing the corpuscles of light in a grain of wax or absolute pressure of ether upon a guinea: much less should I have ventured to introduce Hatchet the carpenter or the cook making plumb pudding into a metaphysical discourse, or bring a cat to assist in an optical experiment. Therefore I told you before that you have some resemblance mixed with a great deal of diversity: but whatever other features you have, since I discern the attentive prying eye, the modest brow, the serenely serious countenance, and flexible neck of the Searches, and find you here in the helpless condition of a new-born babe, it raises a kind of paternal instinct towards you.--- And I, says I, feel myself possessed with a filial reverence and dependence. I begin to wish I had not taken notice of your annexing the faculty of thinking to a system of matter, I am afraid you think me an ungracious boy, but indeed it was nothing but my zeal to defend the spirituality of the mind, which that position

tion of yours had been employed to overthrow, that drew me in to contradict you.---Oh ! says he, you need no apologies : we Searches are the last people in both worlds to take offence at any body for differing from us. As we desire nothing but truth, whatever liberties are taken with us out of an honest regard to that, if they do not convince neither do they displease us. I assure you I do not think a whit the worse of you upon that account, not for your battling my doctrine of consciousness and the uneasiness of desire. I see plainly you did not go out of your way to meddle with me nor dispute in the Knowal spirit of opposition and rivalry, by the pains you take to explain the forbearance and continuance of action, and to distinguish between want and desire, so as that we might both retain our opinions consistently with each other.

Neither do I absolutely blame you for your fallies of imagination, for I know every one must follow the bent of his genius; to do otherwise would be like dancing in fetters : but I doubt you have been dabbling with the French and Italian authors. Take care you do not catch the grimace and levity of the one, the quaintness and marvellous of the others.---Thank you, Pappa, says I, for your kind advice. As to the French and Italians I never had much notion of them, I endeavour rather

rather to take my taste in matters of humour from our cousin Addison. But I cannot yet be quite out of conceit with my flightiness, because but for that perhaps I had not enjoyed the pleasure of your conversation here, nor ever seen that lion's face of yours which first made me a spokesman in this vehicular language. Besides, if I remember right, many of our ancestors have soared upon eagle's wings before now. Your great uncle Plato gives large scope to imagination, especially in his *Phædrus* and *Timæus*, and introduces images as low as the carpenter, the cook or the cat in many of his dialogues. Nay, I have been told by Prince Maurice's parrot, who you know deserves credit being a rational animal, that you yourself were not utterly averse to the familiar and the marvellous.---You are a sawcy Jack, says he smiling, to come over me thus with my parrot. But I related no more than I believed myself: you tell stories that no mortal can believe.---So did uncle Esop, says I, Hesiod, Homer, and even great grandpappa himself when he talked of his golden thigh, and having fought Menelaus at the Trojan war.

10. But, continued I, tho' I suppose the true reason of my blending the serious and the trifling, the usefull and the curious, might be the turn of my imagination drawing me

so to do, yet with submission I seem to have found a good reason to justify me in following the bias. You know every thing is not proper to be said to every body, therefore our predecessors had their esoterics and exoterics and, delivering their lectures by word of mouth, adapted their discourses to their audience: but we moderns, having no other channel to convey our thoughts than the press, cannot pick and choose our company but must pour out meat and milk into the same dish, leaving it to the men and the babes to help themselves, by which means some of the latter might swallow viands that would not only offend their palates but might really prejudice them in their healths. Now if we can cook up our messes of both sorts in such frenchified manner as that the eye cannot presently distinguish which is which, our guests must cull and carve for themselves and taste before they eat, each taking what suits his palate and digestion looking upon the hard and odd tasted bits as intended only for garnish of the dish. I have said so much in commendation of virtue that I hope nobody believes I ever intended to lessen her influence in the least, but as the same observations seem to weaken it in the minds of some which tend to establish it more firmly in those of others, I endeavour to mingle jest and earnest,

spe-

speculation and argument promiscuously, wishing that one man might take me in jest in those very places where another understands me in sober sadness. Therefore if any body finds any thing that appears to overthrow the common rules of religion or morality, let him suppose that I am only amusing the speculative, or that he does not comprehend my drift; or that I have no other than to exercise my talents, or show how dexterously I can walk in slippery places, or any thing rather than he should mind me seriously.---Well, says he, I can absolve you for your uprightness of intention and honest care to avoid hurting the scrupulous. Perhaps I might have taken the like method had I had a more lively vein of fancy; but then I should have studied to imitate our progenitors, who were never superficial tho they sometimes showed a sparkling outside. When they talked the most familiarly, it was to gain the readier attention to some important truths. If they introduced coarse and vulgar images, there was always some valuable substance within. While they seemed only to set their hearers agape with an idle story of a cock and a bull, they would slyly steal in some solid reflection one might be glad to remember. They were wanton with discretion and careless by design. There-

fore I will not enjoin you against following their example provided you follow it throughout: do not trifle for trifling sake, nor unless you have some good purpose to attain by it.—If my execution, says I, shall prove answerable to my design, I dare undertake to satisfy you: but I can promise only for my endeavours, the success is not in my power.

11. But that I may not degenerate from the worthy ancestors you tell me I am descended from, let me give way to the inquisitive temper of the Searches who want to be informed of every particular they think worth enquiry. And since I have learned from you to seek for knowledge from contemplation of the phenomena exhibited, give me leave to ask some questions concerning those I have already experienced. I found an easy passage from the other world, one momentary pang I felt upon the breaking of some vessel in my head, but afterwards my senses retired still further and further inward until I lost them quite without pain or uneasiness. Pray, is the stroke of death always so gentle, or was I favoured in a particular manner? I have read in grave authors that the soul cannot be torn from the body without more pungent anguish than drawing all the teeth from one's jaws or tearing the skin from one's flesh: and the poets

ets describe the gates of death as furrounded with terrors, pains, regrets and despondencies.

---Prithee, says my patron, do not mind either of those gentlemen & they pronounce confidently upon things they know nothing of : but you must distinguish between the gates of death and the avenues leading thereto. Men are generally brought to their end by some violent distemper or grievous wound or bruise, and these are certainly painful, but so are they to those who recover from them.

---I remember, says I, to have heard an eminent physician now with you say that a man who recovers from a bad fever suffers more than him that dies of it.---The doctor, says he, was in the right : for tis the struggle between nature and the disease that makes the pain ; when either ceases to resist, the patient finds ease. It requires as much vigour in the organs of sensation to give pain as pleasure, and when they have lost their tone they can excite neither. The same may be said of those of reflection, for when imagination is become stupified it can no more exhibit ideas of terror and melancholy than it can those of joy and content. As for the convulsions called the agonies of death, they are meerly mechanical, not expressions of uneasiness, but like the twitchings we sometimes feel in our limbs, or habits men get of cutting faces.

Therefore whoever has gone thro a painfull dangerous distemper and given himself over as past recovery knows the worst: nor has death itself, abstracted from the harbingers of it, any thing terrible.---I am glad to hear you say so, says I, for the sake of those who are to take the same passage after me.

12. But how came I among that river of stones, what are they, and who threw them at me so violently?---Upon quitting your vital hold, says he, which you might have done at any time before but for want of knowing what kind of action to exert, for you know we can do nothing without an idea of the thing we are to do, your body, carried along by the Earth's motion, left you behind: while the nocturnal shadow protected you you remained insensible and quiet, but that soon departing too exposed you to the rays of light which follow one another in several lines leaving large spaces between, and you being of very light substance, they only shoved you gently from one line to another by very oblique strokes which gave you those brushes you first felt and awakened your ideas; until upon thrusting your arms directly into the stream they buffeted you about in the manner I found you. So the streams you complain of are no other than the corpuscles of light darted incessantly from the Sun and Stars.

Stars.—Nay now, Pappa, says I, you treat me like a child indeed. Am I to swallow this, or is it an esoteric that we babes are to take for garnish of the dish? Sure the light of this country must be a vastly grosser element than ours in old England: instead of being fit to enter the tender tunics of the eye without hurting, it is enough to knock out one's brains. I am sure I found no colours nor any thing but bumps and bangs amid the bright effulgence poured round me. ---You forget, says he, your own doctrine, that all magnitude is relative. The light here is the very same with that below, but you are not the man you was. You are but an atom in respect of your former body, and that makes you think the corpuscles of light so much bigger by comparison with yourself.--- Truly, says I, I seem to myself a good proper sized person: what though I am but a bag and not a man, methinks I could hold two good Winchester bushels of corn without bursting.---No no, says he, little gentleman, thousands such as you might creep into a single grain. But your present composition being much finer than your former, that which before was the object of vision becomes now an object of touch.----- Touch, indeed, quoth I, with a witness! if we have nothing

softer to touch I shall never desire to use my fingers again as long as I am a vehicle.

13. Since then, continued I, we can only feel the light, how come we to see one another so plainly? Is ether such a jack of all trades as to serve for light and sound and every thing?---Our ether, says he, contains various mixtures, though you folks below use to call it all by one general name because you cannot distinguish them. And so you do water and air, yet you may know by the different tastes and sediments of the clearest waters and the substances extracted from them by chymistry that they are not homogeneous. The same you may know of air by the clouds, vapours, lightnings and meteors formed there, by the dust falling upon your furniture, the concretions gathering upon tops of walls and bark of trees. In like manner ether consists of many dissimilar fluids respectively performing the office of light, sounds, flavours, odours, and objects of other senses you know nothing of. It supplies us likewise with a pabulum for our sustenance. Will you taste it? I think you look a little faintish as if you wanted refreshment.---Now you put it in my head, says I, I do find myself very hungry, though I was so busy in attending to you I did not perceive it before.---Come, says he, put out an arm at one end of
your

your vehicle for me to pull you along, for our pasture does not grow every where, it comes from the tails of comets dispersed up and down in long gleams throughout the vortices. I know of a very good layer about a hundred miles off; we shall be there in an instant.---No sooner said than done: he set me down on the stream and bid me open my mouths, but not gape so wide as I had done before.---But, says I, may'nt I overeat myself? Now I have left my old cravings behind I should be sorry to let any new ones get the better of me.---Never fear, says he, you will contract no vices here if you have not brought any with you.---Upon opening my lips I found a delicious clamminess hang about my tongues and palates and though I could not swallow I felt it insinuate into my pores, as the vivifying spirit of air does into a man's lungs, and refresh me prodigiously. As soon as I had enough it would cling no longer but I perceived my mouths empty.---Well, says Locke, how do you like our celestial ambrosia?---Charmingly, quoth I. 'Tis better than all the fauces of a French cook; better than venison, turtle, or even than a slice of good mutton after a whole morning's air and exercise; and which is best of all to a Search, one may indulge freely without danger of excess.

14. We came back as quick as we went, and I, all life and spirits without any of that heat or listlessness usual upon a plentiful meal of earthly cates, began to throw my legs and arms about and exercise all my faculties with more dexterity and alertness than I had done yet. I was so pleased with my pastime that I could not help crying out, Methinks I perform a multitude of feats for such a little fellow, I like this agile body hugely: tis a thousand times better than that great clumsy carcase I was stifled up in upon earth.

But if I am really the minute insect you would persuade me, thousands of whom might creep into a grain of corn, how is there room for that variety of parts I contain? I have arms and legs and eyes and ears and mouths all around me, every one of these must have muscles and fibres to move them, besides organs of reflection, vocal fibres and those numberless springs composing the velvet nap in my inside by which I move every thing else.-----You forget again, says he, your chapter upon the divisibility of matter, and that the smallest conceivable particle may contain as great a variety of works as the whole human machinery. But you multiply the parts of your composition too fast: do not you know that all matter is homogeneous and the secondary qualities of compounds
result.

result from their form? The same texture may form an eye, or an ear or any other organ, according as the threads of it are variously disposed, provided the agent have a command over every particular thread to hold it in what posture he thinks proper. We have a little mixture of flesh with vessels fitted for vital circulation carried on mechanically, but this is very little in proportion to our system of sensory and motory nerves which lying within a small compass our spirit, bearing as large a share in our whole composition as our body, is present throughout the greatest part of them and operates almost immediately without that long string of channels beyond one another perpetuating motion to the human members.

Not that you have acquired any new instruments of action upon coming hither, for you had all you now possess before you left your terrestrial mansion, but the gross veils encompassing you there were an impediment to your functions: all the velvet springs that did not communicate with some nerve of your outer frame being wholly useless to you. Upon being delivered from our corporeal manacles we have the command of every part belonging to us as soon as we have learnt the ready use of them by competent practice. You shall see me now throw myself into a variety

variety of shapes to satisfy you of what I say.---At this word he played all the pranks of a Proteus, first a man, then a horse, an eagle, a dolphin, a serpent, a stream of water, a flame of fire, a Briareus, an Argos, a Virgilian Fame, a polypus.-----Upon my word, says I, this is very pretty sport: you can never want divertisement, being such a nation of Harlequins.-----We don't amuse ourselves with these gambols, says he, we have something else to do: I only played them now to show you what you are capable of.

We have another flight of hand we are more fond of practising: we have our imagination as perfectly under command as our limbs, so can raise passions and desires of any sort we find expedient. Passion you know assists greatly in the exertion of activity, and you have found a secret unknown to former moralists that happiness consists chiefly in the gratification of desire: therefore it may be said of passion and desire, as of fire and water, that they are excellent servants but very bad masters. We never let them get the mastery over us; as we take them up we can lay them down again the moment we please, so to adopt your distinction, never have any wants though we abound in desires.----O, charming! cries I, This is a most desirable

firable accomplishment. Pray, dear good father and tutor, can't you instruct me in this art? I had rather you would begin to teach me this than put me in the way of exerting those new senses you spoke of.

15. You will not have time, replied he, to make much progress: tis a difficult lesson, not to be learned presently. As to more senses, you have enow already: the two of sight and hearing together with the vocal language you have acquired will suffice for all you have to do during your short stay among us.-----

Alas! alas! cries I. Now you strike me quite down. What then! Am I to be snatched away from this new life in my cradle? I was in hopes I was settled here for two or three thousand years at least.-----

I tell you, says my tutor, You are not come now to reside among us, but only upon a visit in order to carry back an idea of this place and people to your countrymen. It will not be many years before we shall have you here again to take up your abode among us, and the manner of it will depend very much upon your conduct below. Possess your mind with becoming sentiments of that power who presides over both worlds and do all the good you can to your fellow creatures: no matter how small your powers be, the part you are to act is of divine appointment, tis your business

finels to act it well. Endeavour what you can towards moderating your passions and bending desire to the ply of reason: it will make you apter to learn that science when you come here again. We have many regions in this country: perhaps upon your return you may not find everything just as you have seen it now nor may I be in the way to assist you: but wherever you fall, if you come rightly prepared, God will find you a protector and a commodious habitation fitted for a life of happiness.---I listened attentively to his advice, hoped to retain it strongly in memory, and that the idea he had already given me of things here would instigate me to follow it. And am I then, says I, to travel back the irremeable way? I thought nature had opposed indissoluble bars against the return of a departed soul to its old habitation.----Your present journey, says he, is supernatural, so being out of the course of nature I will not pretend to account for it. The like has never happened within my remembrance nor that of any I have conversed with. That stroke you felt in your head was not a real apoplexy, for your body lies below as sound and entire as before you fell asleep without rupture or disorder in any of its vessels, still performing its vital circulations and
secretions

secretions though destitute of all thought and sensation.

16. And you came here differently accouttered from other travellers, for you have brought away your memory and imagination along with you: not that they have not the tablets of those faculties too but without any writing or figures whatsoever upon them; all their old traces, their science, their sentiments, their habits, their desires, their experience, and in general their ideas, totally effaced: so they come into this world as much a blank paper as ever they were born into the last, ignorant and helpless and having every thing to learn. Sensation begins the fresh writing upon them, from whence grow ideas of reflection running into combinations and associations, generating comparisons, distinctions and relations, and at length forming judgement and understanding: thus they rise to knowledge slowly and gradually in the manner they did in their former state. Some or other of us are constantly near at hand ready to undertake their nurture, to lead them into the ambrosial streams as they have occasion, to assist in opening their new faculties and instil instruction into them as they can receive it.----With your leave, says I, good master, I would beg your information concerning two difficulties that occur upon this
this

this theory of the blank paper. One is how you can remember what you knew below so well as I find you do: the other how your condition here can be affected by your former deportment, if you leave all your old sentiments, habits and passions behind you. Is there any judicature to assign your several fortunes according to your merits.

17. He replied let us consider your difficulties one at a time: but we will begin with the last because that may help to explain the former. We receive not our portions by the decision of any visible judicature but all things fall out among us according to the operation of natural causes: nevertheless we know that nature does not work by chance but her courses are established in wisdom and justice, so as by a chain of inevitable consequences to answer the purpose of a strict and impartial judicature. Our vehicles by lying so long enclosed in human bodies receive a change in their texture from the continual action thereof, so that we come out diversly modified with different talents natural parts and genius according to the way of life we had followed before: we leave indeed all our old acquisitions behind, but bring with us a particular aptness to make new ones similar to those we possessed before. The laws of nature are so provided that vice weakens the
animal

animal powers, distorts the mental organs and introduces particles of gross matter into the delicate body, which give racking pains and cause grievous disorders of mind. Whereas the practice of virtue strengthens the constitution, purifies the faculties and gives a happy facility to acquire the same virtues again. As no man is perfectly virtuous none arrives here without a mixture of terrene concretion, which proves very troublesome and a hindrance to his operations. In some it is so deeply infixed as never to be moved, so we are forced to abandon those poor wretches to misery and despair: the rest furnish us with a great part of our employment to clear them of their obstructions, which requires much time and pains, the more or less of both and attended with the greater or less inconvenience to them in the mean while according to the degrees of foulness they have contracted. Thus every man receives the just reward or punishment of his actions by the ministry of second causes without needing a formal trial and judgement.

18. To come now to your other difficulty: it is easy to comprehend from what has been said upon the first that we may know by the condition a new comer appears in what have been his courses of behaviour, his way of living, the company he has consorted or ob-

jects he has conversed with, and consequently the particular country he came from supplying him with them: and by tracing back our own residence in like manner we may discover who has been our relation, our friend or our compatriot. You may suppose likewise that ether being extremely voluble and elastic, not a dust can stir upon earth but must affect its vibrations and disposition of its particles here: and we having a very piercing sight to discern the minutest objects together with a great readiness at investigating causes from effects, can read in the situation of the fluids composing ether all that passes or has passed below. But as I doubt it will be difficult to make you sensible how we can do this I shall pass on to another method you may more easily comprehend. You remember I told you of our sentient language wherein by withdrawing our own ideas we can perceive those arising in any other vehicle applied close to our side: now we can do the same with respect to living men, for by applying ourselves close to their sensories, though their coats being thicker they would hear nothing of us if we were to speak to them, yet we can discern all they know or remember or think on. We are not very fond of this employment, the sublunary air being not agreeable to us, but some of us go down from
time

time to time to bring accounts for the benefit of the rest. As other vehicles have played the same game with us formerly while we were alive they can inform us of particulars happening or relating to ourselves which we had utterly forgotten. And thus I may be said to remember occurrences I am not conscious of as you could remember the transactions of ancient times which you had read in some history. When you come to converse with our people you will find that, notwithstanding their coming here a meer blank paper, they have since got written upon it an exact memorial of their past life and conversation.

19. I readily apprehend, says I, this last method of recovering your former traces tho. I cannot say the same of the other two. But if these new born vehicles advance so slowly in their learning, how came I to make such a rapid progress as I seem to have done?---- You don't consider, says he, you brought your imagination with you and old stock of ideas, so had little more to do. I needed only lead you to the exertion of your new senses, you had judgements and reflections in store by which you could make use of their notices; only bring you to your voice, for you had matter ready for your utterance as soon as you could pronounce it. And let

me tell you your progress has been more rapid than you think of. How long do you imagine you have been among us?----Why, I cannot tell exactly, says I, having observed no distinction of days and nights: but by the many trials I made before I could get the tolerable management of my faculties and the many lectures you have favoured me with, I should guess myself about a fortnight or three weeks old.——What sort of time, says he, do you reckon by?——Time! says I. I do not understand you: I know but one sort wherein sixty minutes go to an hour and twenty four hours to a day.——Ay, but, says he, I mean celestial or sublunary time. You know I have told you below that we measure time by the succession of ideas: now our ideas here flow in so much quicker succession than those of heavy mortals upon earth that we pass a great deal more time between sun and sun. The clocks you left at home have gone but one hour forty two minutes and fourteen seconds since I first found you boxing with the corpuscles of light.---Surprizing! says I. Now this ends another wonder of mine, that I never felt myself drowsy all this while.-----No more would you, says he, if you were to stay ever so long. We never sleep, nor ever find the want of it.-----Then, says I, how do you
find

find employment for your time, of which you have so much more than other people? Does it never hang heavy upon your hands?

20. Never in the least, says he. We have an inexhaustible variety of employments: when we have enough of one we find others ready at hand to which we can turn with fresh relish: you do not know what a field we have to expatiate in. There is the nurture and education of our adopted families, the providing instruments to pick out the terrene concretion gotten into them; these we procure from the planetary systems, for you know that Newton tells you that air is an extract of little particles from the most solid bodies, so it furnishes us with fine spiculæ of steel, silver, gold or any other hard substance we want. The dividing the ambrosial streams to disperse them about more equally, as you disperse your new river water for the uses of the several quarters of the town. The journeying down to earth to learn what passes there. Studying or practising that art of reading I mentioned before by the disposition of ethereal fluids and investigation of causes from effects. Observing one anothers talents and characters, which we may call the knowledge of the world. Purifying ourselves from any fæces remaining within us, or removing

any new concretions that might gather: for we have the seeds of diseases among us though we suffer none of them to grow, because we can expell them almost as easily as you could have washed the soil off your body. Besides the benefit of conversation by our sentient language, wherein we can mutually impart and receive information of all kinds and from all quarters with the greatest readiness and precision. Then we can travel with incredible swiftness to distant regions of the world, follow the motions of the heavenly bodies, study the systems of nature and oeconomy of Providence, and from thence rise to the Divine Attributes: which let me tell you afford larger scope for contemplation and delightfull wonder than I can explain to you in a manner suitable to your conception.

These are noble occupations well worthy the attention of a rational creature and copious enough in their several branches to engage our attention incessantly: if we had any vacancies we should not want means of filling them up with divertisement, for we could gather materials of all sorts from the several atmospheres and as those little particles, which repell so strongly at a small distance, would cohere as strongly if brought into contact, we might practise the mechanic arts, fabricate various machines and weave curious textures

tures for our entertainment; but we have no use for those things and no leisure to throw away upon trifles. Add to this the great agility and pliancy of our bodies, of which I have given you ocular demonstration, and our absolute command over desire. We have none of that fullness and perverseness which often sets you mortals against things in themselves agreeable: on the contrary we can turn desire on the most insipid objects or make those pleasant which naturally had nothing alluring, upon proper occasion if nothing more inviting or important should offer. I was as much pleased in running thro those metamorphoses I showed you a little while ago as you could be in the novelty of the sight, and could this instant, if there were good reason for it, apply as eagerly to a game at push pin as any child of four years old. With all these advantages you may well conceive we have work enough before us to take up an eternity without weariness or satiety.

21. What then, says I, are you to live for ever in this vehicular state? Not so, answered he, we are longevous but not eternal: yet we reckon ourselves immortal because we do not look upon our departure as a death. We have not all the same length of life allotted us, some depart sooner others later, but we

all wear out our natural terms having neither diseases nor wounds nor destructive accidents among us; for the threads of our texture, though extremely pliable, are of so tough a nature that nothing can break them: when the appointed time comes our vehicles, worn thin by age in some particular part, suddenly burst and let loose the enclosed spirit. Those who have gone through the most arduous and painful trials below commonly go first: next to them such as have died before their birth or in their tender infancy: but none were ever known to be advanced, for so we term our departure, before they have entirely purged themselves from all remains of their terrene concretions. By our thorough insight into nature we know assuredly that there is still a third world beyond this, a world of purer love, stricter harmony, higher capacities and more exalted happiness than we now possess, replete with spiritual substance wherein we shall be absorbed: therefore instead of condoling we congratulate one another upon discovering signs of an approaching dissolution. Nevertheless being so amply provided here we live perfectly well satisfied with our present condition, content to stay here for ever if it so pleased God, yet desirous and glad to be advanced upon receiving the summons to a higher station.

22. You give me, says I, a most inviting description of your situation and way of life: methinks tis worth any pains I can take for the time I am still to grovel upon the earth below to fit myself for a state so abounding in sources of present enjoyment with such glorious expectations beyond. But since you have mentioned conversation as one of your principal amusements, pray where do you find your company? I suppose they gather together in cities and we are here in some remote desert out of the way of any road, for I have not seen a soul besides yourself since I could use my eyes. That is, says he, because you have not made the full use of them. Put me out twenty now all on one side and direct them upon the same point: then look about ye and observe what you can see. Oh! now I see, says I, a multitude of long lank bags flitting by me like shadows: but they all go the same way. Have they any wings? for I protest I cannot discern. They whisk along so nimbly I cannot get a distinct view of them. And now I recollect, when you carried me to the ambrosial fountain you kept kicking behind you all the way, like a dab-chick in diving, with a pair of sprawling legs, one on each side of me. But I cannot guess what you did with them: for though I can sprawl out legs too, I feel
neither

neither ground to tread on nor water to push against, and I am afraid to stretch them out too far for fear of those plaguy rays of light knocking against my shins.

Those very rays, says he, so formidable to you, are the springs to convey us on all our journeys. Don't you know that in mills, watches and other complicated machines one power is made to produce various movements? The stream for instance driving a throwing mill runs always directly forward one way, yet the artist finds means of turning this force laterally or obliquely or circularly upon any of the works. In like manner we make a more simple machine of ourselves, for thrusting a leg against some corpuscle of light we take any momentum we please therefrom and any direction within the compass of a quadrant. You are sensible it is expedient for our speed that we should take a very oblique direction making as small an angle as possible with the line of the ray: but as this must still throw us away from it in time, we quickly find another ray on our other side from whence we take with another leg a direction equally oblique but turned the contrary way. Thus we pass along between two rays, one for right foot and tother for left, much in the same manner as a Dutchman skating upon the ice. Our motion indeed

deed is a little serpentine, but the rays being no more than one thousandth of an inch apart and we going about ten miles at a step when we are in haste, this small undulation may well pass for a right line. As the ether makes resistance against our light bodies we throw out lengthways in the form of worms when we go forwards and draw ourselves out dish fashion when we would stop. Oh pretty! says I. Be so kind as teach me to skate a little. I am loath to give you the trouble of lugging me always about like a beggar's brat. Be content, says he, since I don't grudge the trouble. Think with yourself how much time and dexterity is requisite to practise this art: for we must give our touches with the nicest exactness imaginable, the least mistake would carry us out of our course or throw us into the middle of those streams you found so troublesome. Therefore this is the last thing we learn to be perfect in: there are some among us have been here these two hundred years and can scarce waddle yet.

Those who were bigots below, being always used to leading strings, come on very slowly: they will let us carry them about where we please and tell them any thing, but tis the hardest matter in the world to get them to help themselves or try to find their feet.

feet. On the other hand the Knowals wont submit to be shown any thing, so they kick and cuff about at random and get themselves tossed from ray to ray without ever learning a step. Tis well our vehicular flesh is of so healing a temper or they would be beaten to mummies before they had made any progress. Ay but, quoth I, you dont consider what an apt child I am, having brought my imagination and memory entire with me. Besides as I am a Search I shall have the benefit of my own reason and other people's experience too. No, no, says he, I tell you the difficulty and danger of the attempt is greater than you apprehend. Are there no go-carts in this country? quoth I. Do, nurse Locke, get me one if there is such a thing to be had. You understand the mechanic arts, and are there no wooden particles in the air of which you might make me a pretty one now? I would willingly learn to creep if I cannot run. Prithee, child, says he, be patient: I never knew a Search urge things so pressingly before. Besides there is another art necessary to qualify you for practising this: if you were now to take a strong impulse with your foot you would find yourself doubled in like a night cap, and your knee driven thro your body, would bump up against your head; therefore when we go to receive a stroke we
at

at the same time give a rigidness to every fibre of our vehicle, which makes us compact like a body of steel and the whole of us moves together.

I beg pardon, says I, for my eagerness: but if I must not think of the practice, may not I wish to understand the theory of your motions? I took notice before that all the travellers I saw were passing the same way, and as the rays keep continually flowing from the Sun, I can easily comprehend how you may skate along them quite to the regions of the comets: but how do you contrive to get back again? Can you strive against the stream, or sail like a ship with the wind before the mast? There is no occasion, says he, for we never want favourable gales which way soever we are bound. Don't you consider that there flow rays from the stars too as well as from the sun, and as they come in all directions we never fail to find some or other of them that fit our purpose to a hair. But then, says I, you must go very slow, for their feeble impulse cannot carry you near so fast as the vigorous solar rays. Pardon me there, says he: you know the inert force of matter by which a body would move on for ever with the same swiftness unless stopped by something else, therefore these transverse rays do not abate at all of their pace for their immense distance
from

from the star whereout they issued. You below see the sun brighter than any other luminary because more of his rays enter your eye together, but each ray taken singly, whether of solar or stellar or culinary light, moves with the same strength and velocity. Indeed the stellar rays being wider asunder make our path a little more serpentine and our progress slower, but this is a trifling difference not worth taking notice of: and we are obliged to be a little more circumspect in crossing the suns rays that we do not dash against them. He then drew me a little aside to a place where I could see travellers hasting several ways by help of different rays: and it delighted me to admire how, though they went at a prodigious rate, they managed with such amazing dexterity as never to touch the crossing streams of light nor jostle one another.

23. While I was entertaining myself with this spectacle, I heard my friend call out with a loud voice that almost stunned me. *Hola!* here we are. Presently there came up a vehicle that stood and stared at me wistfully as I did at him again: he then entered into close conference with Locke in the sentient language, after which he surveyed me a second time from top to toe, and having perused me as much as he liked I saw him
strike

strike his foot against a solar ray, which waisted him over to a stellar from whence he took a direction almost at right angles with the former and was instantly gone out of sight. Pray, says I, who might that very curious gentleman be? He should be a Search by his prying eye, but methinks he looks like a weak brother. He examined me all over so strictly that if I had not heard you call to him I should have suspected he had some design upon us. So he has, says Locke, but no bad one. You cannot know his face, he having been dead above a thousand years ago, but you have read his compositions. He is Aulus Gellius author or rather collector of the Attic night's entertainment; for having a very moderate capacity he could produce little of his own, but made it his business to pick up and gather the scraps of his oracle Favorinus: however as he was a diligent honest creature we acknowledge him for one of our line. You find him often quoted by the learned, for tho his writings contain nothing of much importance, yet such minute matters as he has recorded are sometimes turned to good use by others. I am glad of that, says I, for the sake of my microscope: for if I am not usefull myself, I may be the cause of other people's being usefull. As industry and exactness, continued he, are his talents,

we put him upon employments here wherein those qualities only are requisite. He is now gone down to earth upon an errand of that sort for you. I thank him kindly, says I: but what service can he do me there? He cannot carry news of me to my family, for you told me you could not make your sentient language understood by the living. No, says Locke, tis a business relating to your own proper person. You have now no intercourse with your body so can leave no traces there of all you do or see: now he is gone to engrave traces of every particular in your sensory with a fine pencil or style he will pick out of the air as he goes along; for else when you awoke you would think you had slept sound all night without any thing extraordinary happening to you. I gave him an exact account just now of all that has passed hitherto and shall take care to send down intelligence from time to time of what further shall fall in our way. I hope, says I, you will suppress what we have just said of the gentleman: he might have reason to take it amiss that we have spoken so freely of his character and performances, especially at the very time when he is doing us a friendly office. Never disturb yourself about that, says my patron: we have none of that vanity clinging more or less to all mortals,

mortals, and which is the first speck of terrene concretion we endeavour to pick out of them as being the most troublesome. We value ourselves here not upon our talents but the application of them: natural infirmity and shallowness of capacity are no disgraces among us, therefore he is not ashamed of having them nor will be offended with us for taking notice of them. So I shall suppress nothing, neither will he, but you will find a compleater narrative of your journey than if you had pen ink and paper to set down everything as you go along. That pleases me much, replied I, for I would not lose a tittle of all the very remarkable occurrences befalling me here.

24. But with your good leave, Master, I would beg your explanation of one or two particulars relating to this errand of my cousin Gellius. As I have my memory with me and actually remember all that has passed since my arrival, cannot I recollect it again when I go back without troubling my cousin to write it down for me? Then if I have brought away the tablet of my memory, what is there left for him to write upon? And how can you or anybody send him intelligence of my private thoughts? I'll tell you, says he, how the case stands. The human memory consists of several membranes lined

one within another: the innermost are softest and quickest to take impressions; the outer are tougher and more retentive. The former serve you for common occasions, as in ordinary discourse where you only want just to remember what was said last till you have given a proper answer and then forget it again instantly. This membrane being extremely pliant conforms readily to the impressions in the others, which enables you to recollect things recorded there many years ago. Now you have gotten only the innermost pellicle of all here which answers your purpose well enough while there is no outer stamp to press upon it, but when you come to have it squeezed again into your old sensory your present traces would be quite smoothed out, like a rumpled muslin upon being ironed, and all you know now vanish like an idle tale if our industrious friend were not to work correspondent channels fitted exactly to receive them in the outer coats. So much for your two first objections, the third you must remove yourself by telling me all your thoughts: we shall have time enough to send after him, for he is a little tedious in his motions and scrupulously exact: I warrant ye now he will be puzzling about it in the atmosphere a whole day of vehicular time before he will find a style to his mind.

25. But I cannot trust to any narrative you will give me by voice, you may overlook or omit something; I must have it in the sentient language. Lack a day! quoth I, you know very well I can't talk a syllable in that. I know very well, says he, on the contrary that you cannot help talking if you would never so fain: the whole art here lies in the hearer and you may trust me for that. Come, hold your head still and put out a pair of ears below: I may have occasion to speak to you at intervals. So saying he thrust out a couple of broad arms or rather flappers, something like the tails of Turkey sheep with which he muffled up my head all round as with the hood of a great coat. I knew my business was only to ruminate on all that had passed in my thoughts from my first arrival, for he would feel the ideas as they rose. In this guise he held me some time, feeling and speaking alternately in a kind of dialogue wherein himself was the sole talker, after the following manner.—Ay, but how did you feel yourself on first withdrawing from your body?—What were your first sensations on coming here?—What were your thoughts when you could hear me speak before you had gotten your voice?-----Hay! Let's have that over again.-----Well, now I have your history perfect enough. But I find

you have some wishes you were shy of disclosing. Don't endeavour to conceal anything from me, you know I am your friend; and besides it would be in vain, for I should ferret you out.-----Oh! You want to hear something of your relations: and your wife is uppermost in your thoughts.----I commend you however for thinking of your father and mother though they came hither when you was a little baby incapable of knowing them: and your guardian and the others who took care of your education. They are all among us employed in ways suited to their respective characters and inclinations.----No, you cannot see them: they are all a vast way off dispersed up and down in different regions, for having but lately attained the art of skating they are gone to make themselves acquainted with the country.----Well, well, you shall hear more of your dearee presently. We seldom meet with husbands so anxious about their wives, unless now and then a Search that has happened to match with one of the same blood.----Nonpariel! Ay, so they are all, either the best or worst that ever man had.----Yes, yes, I know she was a Search: we all look upon her as such and bear her a brotherly affection.----We had very little trouble with her as she brought few terrene concretions and those are in a great measure cleared

cleared away as she was very patient and desirous to have them removed. Having a soft hand and great tenderness of temper we employ her in picking out the spots from prudes, demireps and ladies of fashion who have lived in a continual round of genteel diversions doing neither good nor harm.---- Ay, ay, she would come to see you with all her heart, but consider she is but seven years old in this world and has not yet learned to go. But what would you say now if I should carry you to visit her? She plies close to her picking trade with some of the finest aerial needles we can get for her not above fifty miles off, we may skate there easily upon a couple of rays of Spica Virginis in two hours vehicular time.----Nay, none of your coaxing and cajoling, your Pray Sirs and Do Sirs: when I offer a thing I do it readily without needing to be pressed.----He then unmuffled and let me go: I durst not speak before for fear of putting him out of humour, but now thought I might open, yet was forced to moderate my joy by his last rebuke. So believing a short speech was best, Thank ye, thank ye, says I, dear kind patron: she was the most agreeable if not the most valuable gift heaven bestowed upon me below, and this offer is the most acceptable I could have wished. You have taken pains

for my good and instruction before, but this instance shows your benevolence here is tender and indulgent as well as judicious. I then presently stretched out an arm for him to take me by. Hold, hold a moment, says he, till I give you some instructions for your conduct upon this visit.

26. We gave her an inkling some time ago of your coming to visit her in the shades like another Orpheus. Ever since she has taken it into her head to call herself Euridice, for we have our innocent fancies, allegories and fables here as well as you mortals. We were willing to humour her, so she passes currently by that name and you must mind to call her by none other. Oh! any thing, quoth I, that will please her best. Euridice! methinks tis a pretty name, and I am sure the real Euridice could not better deserve such a journey after her. In the next place, says my instructor, she is not a woman here, so you must consider her as an intimate friend, not as a wife. Let us have no kissings nor embracings, no raptures nor transports: remember your own distinction between love and fondness, and what I have told you already that we are here all Isangeloi, therefore your love must be pure, sedate and angelical. I'll try my utmost, says I, to satisfy you, and hope to succeed the better

better because I always endeavoured below to make my love as refined and sentimental as possible. And indeed I found no great difficulty in the task, for she had so many angelic qualities when a woman that she was fitted to captivate the understanding as well as the heart. But we waste time: two long hours seem a tedious while. He then took hold of my arm and we went on swimmingly after the rate of forty thousand miles in a minute of Paul's clock. He clasped me fast round the wrist, nevertheless I clung round his too like a drowning man to a bough. I was in high spirits all the way, as you may suppose, more alert and joyful than on the morning of my wedding day, for in the lottery of marriage there is always a hazard let a man take what care he can. I can give no account of all we met or passed by for my whole thoughts were taken up with one object so that I had not a glance to spare for any thing else. At length we stopped, and I beheld a vehicle intent on picking out the dross from another with a needle. My friend whispered something to it in the sentient language when instantly there shot out the dear well known face, not that of the blooming bride which enchanted my youthfull eyes, but that of the serenely chearfull matron endeared by eighteen years cohabitation, when

we used to take sweet counsel together upon the measures of our conduct, the oeconomy of our affairs, the education of our children ; or remark to one another the growing seeds of sagacity appearing in their little contrivances and prattle as they played around us.

27. My dear, dear Euridice, says I, do I see that face once more which used to be a continual feast to mine eyes ! expressive of a most amiable and valuable character within, innocence, sweetness, sincerity, constancy, penetration, judgement, discretion, affability, politeness, easiness, sprightliness : my pleasure at home and my credit abroad. I never knew what a happy life was till you taught it me, and have never felt it compleatly since your departure. Welcome, thrice welcome, says she, to these happy mansions, my sincerest, tenderest, truest, best beloved friend. How happy is it we can thus meet without reflection of having done any thing which might make one another unfit for this place ! We lived in harmony and love, contented within ourselves yet not forgetfull of the duties we owed to others, delighted to please each other even in trifles without neglecting our more important concerns, enjoying the present moment but careful to enjoy it in such manner as might leave no remorse behind,

hind. Thanks to you, my Euridice, says I, that I have no more to reflect upon with remorse. Your sprightly temper gave me spirits enabling me to improve my faculties, and your innocent gaiety taught me to make some use of them by rendring me more sociable and active. I hope to come here one day with the less terrene concretion for having had the benefit of your company. You can scarce have brought any here, you were all innocence and unreserved goodness. And indeed I see by the serene satisfaction in your countenance that you have nothing to trouble you. Oh! how charmingly different does it look from that I saw last in convulsions and agonies!

Name them not, my Search, says she: the avenues of death were grievous, beset with pains, restlessness and regrets at leaving my husband and children: but they quickly end in a quiet sleep, from whence we awake to new life and enjoyment. Every thing is new to us yet nothing appears strange because we remember nothing of our former scenes. We soon discover that we are in a society and it is not long before we learn to converse among them. By means of our sentient language, which your friend tells me you do not understand, we quickly receive information of what we have been, what we have done and what

what we have gone thro: and believe me, my Orphy, (your friend will permit me to call you so), the troubles we have undergone appear as nothing in comparison of the state they lead into. We have here an infinite variety of enjoyments without any thing to disturb us except the dross we bring from below, and tho the clearing it away be painfull we submit gladly for the greater suppleness of our limbs and command of our faculties we have upon getting rid of it. The people of this country are universally obliging and benevolent: every body is helpfull to me and I have the pleasure of being helpfull to others. Though I am yet as a child unable to stir they carry me about wherever I desire, so I make visits more entertaining and improving than those meerly harmless ones I used to make below: for instead of dross and trifle the discourse runs upon the characters and occupations of the inhabitants here, the quickest and easiest methods of picking out terrene concretions, the intelligences continually received from earth, the creatures, productions and histories of the other planets; and in such an ample field we always find some thing new, interesting and instructive. Your conversation has prepared me for a relish of the deeper sciences. I can attend to lectures of philosophy upon the laws of nature, the

the courses of the planets, the various particles of air, the commixtures of etherial fluids, the systems of Providence and the glorious Attributes of God. O Search! could you discern these Attributes as fully as they are discerned here you would always fear but never be afraid of him, you would look upon his commands as advices kindly given for your interest, you would possess a sure and glowing hope which would prove a sheath to every natural evil and an effectual bar against every moral evil. But with all these engagements you may well think I have no temptations to the vapours, no vacant or insipid time; nor had I more than one thing to wish and am thankfull it is now granted me tho but for a moment. Heaven send it may be granted me one time or other for a long, long continuance.

Amen, amen, says I, may we meet in such happiness as you have given me the idea of never to part again. Your remembrance is my continual solace from morning to night: the image of my Riddy goes with me into company, attends me in business; entertains me in my walks and steals in upon my studies. Heaven made us the principal instruments of one anothers happiness upon earth, and I think the prospect or even possibility of our being so again adds to my diligence

ligence in the prosecution of those duties that lead to a better state. It was with that view, says she, I suggested the thought. You know I always wished your good most ardently and cordially: the same desire possesses me still and directs me in employing the few moments we have together. While the thought of Riddy does you any real service indulge it, but let it not interfere to interrupt you in any thing you ought to do. You call me yours and I call you mine, but we were only lent, not given, to one another, as we now find by sad experience. Therefore your only chance of having the loan returned is by making yourself agreeable to the lender. For know, Orphy, that our works follow us, not indeed in themselves but in their certain consequences. We rise with different talents and capacities according as our little bodies have been formed and fashioned in the mould wherein they have lain enclosed. You cannot know directly what effect your outward actions will have upon the growing fœtus within you, but the same power which gave laws to man established likewise those of nature and has made them both so to correspond that while you fulfill your duty you will unknowingly furnish yourself with powers for your use and enjoyment hereafter. Therefore serve God
by

by doing service to his creatures: endeavour to make such acquisitions as will be most usefull to them for those will be most usefull to your own main purpose; nor suffer any fond indulgence to retard you in compleating the remainder of that work you have still to do.

My kind benefactress, says I, you were born to do me solid good as well as to give me delight. Your advice was never wanting if at any time I happened to forget myself. Your example taught me to be more obliging and tender to others. You encouraged and assisted me in any thing laudable and becoming a reasonable creature. The happiness conveyed me by your means was one topic of my thanksgivings, and I used to join more heartily in the public prayers as knowing that Riddy was one of the congregation. Shall then the remembrance of my Riddy do me a prejudice when she herself was incapable of doing any? Your loss was a heavy and grievous stroke upon me, but I strove and struggled rather to thank heaven for the gracious loan I had had than to repine at its being withdrawn. I then reflected it was not wholly withdrawn, for I beheld your likeness in your two girls and began to cast about how I might exert my love for you in my cares and contrivances for the benefit of
your

your children. I still call them yours, for I love them better in that light than while I consider them only as my own. They answer my cares as I could wish and the poor things do what they can to repay them by their observance and tenderness : but nothing upon earth can fully compensate for the want of you.

28. I hear very good accounts of your girls, says she, for I call them yours for the same reason you call them mine. Somebody or other in the neighbourhood is going down continually, and I told you we were very sociable, so scarce a day passes but I hear of you all. It is one of our amusements to communicate all the good news we can pick up of each other's friends and relations : but ill news quickly stagnates, for we have no taste for scandal nor are we solicitous to enquire after things we cannot remedy. Unless when any one recovers from his evil courses, for then we have them all displayed to us in full colours, and you cannot imagine what congratulations there are among us upon such occasions : there is more joy for a while than over ninety and nine just persons who needed no repentance. I hope, says I, your children will never deviate into those bye paths which must be trodden before they can give that extraordinary joy : you will be better pleased with

with the continual calm satisfaction of hearing they persevere in the road you have set them into. Undoubtedly, says she, for you know we always used ourselves to prefer a lasting complacency of mind before a sudden transport. But since it has been known you were to come here, nobody would tell me a word of our family, for they said they would not anticipate the pleasure I should receive in hearing the relation from yourself.

But how in the name of goodness, says I, could they know that? for my good patron Locke has told me that my journey was extraordinary and did not depend upon natural causes by which they might investigate it. No matter for that, says she: you don't know what discoveries our people can make by their understanding the sentient language: they can discern your secret thoughts and motives better than you can yourselves, and know by the state of your imagination what future imaginations it will produce. When you mentioned me in your argument upon the uneasiness of desire in your chapter on Satisfaction they foresaw you would never be quiet till you had contrived one way or other to have some converse with me. So I know nothing of your history for that two years and a half.

Why,

Why, says I, it has run much in the same tenour with that you have already been informed of. Your girls go on in such improvements as I can give or procure for them, and in forming their characters to make themselves usefull and agreeable though in different ways. Serena has the modest brow, the flexible neck, attentive eye and true countenance of a Search. Sparkler, you know, we used to call little Mamma and she still preserves your likeness: the same sprightly look, the same lively action and the same inoffensive archness of tongue. I would instruct them in the foundations of religion and morality but my notions are so abstracted that though they may do tolerably for myself they are unfit for common use. When I act like other people it is seldom upon the same grounds, my principles are so selfish I dare not own them; even virtue with me is self-interest, for I endeavour to practise it, not because I must, nor because I ought, nor because it is good in itself, nor to gain credit or escape censure of others, but because I believe it the surest way to procure my own advantage. So I scarce ever give them any documents, but as I am much with them, attend to their prattle and endeavour to lead their thoughts gently into such trains as may tend to their improvement. If they let drop any inconsistencies

siftencies I take notice of them with a smiling air; if they consider a thing partially I turn it about for them in various lights, and by short observations, similies and examples apposite to the occasion I strive insensibly to make their reasonings just and connected, their views clear and full, their aims directed rather to the usefull than the showy; and not so much to teach as show them how to strike out lights for themselves. As they delight in figure and allegory I tell them the family arms of the Searches are a microscope and a balance with a bit of gold in one scale outweighing a gaudy plume of feathers in the other, in a field of natural green interspersed with common flowers, and a bee extracting honey from any that falls in his way: the motto for the men *Esse quam videri*, To be than to appear, and for the women, *Be merry and wise*. That the Knowal arms are a concave mirror placed near the eye to see itself in and an inverted telescope to look at everything else, upon a brazen shield ornamented with butterflies and trophies of victory: the male motto *Veni, vidi, vici*, I came, I saw, I conquered, the female *None so pretty*.

With these little helps your girls have acquired for themselves as much soundness of judgement and considerateness of thought as

may content a parent. They carry an unaffected openness and gaiety upon their countenance, a watchfull observance and discretion in their hearts. They have just sentiments of their Maker esteeming him as their sole benefactor, as an indulgent but not fond parent, who gives his commands for their benefit but will not suffer them to be disobeyed with impunity. They are carefull to remember his blessings with thanksgiving, persuaded that every evil terminates ultimately in some good; assiduous not scrupulous in their devotions, strict not superstitious in their religion. They can sympathize with the distressed, rejoice sincerely with the prosperous, and are glad to assist in any good office within their power. They can conform their minds readily to the circumstances of their situation, pass whole winter months with me alone in a retired country without vapours or discontent or hankering after company and then enter into all the innocent diversions of the town without being fond of any; can find resources in themselves without cards or plays or foreign aids, or can enjoy the busy world without being enslaved by it.

You delight my heart, says she, with this charming account of my babes: their welfare makes one of my joys in this place and it is no small comfort to reflect that I have
done

done my poor endeavours towards setting them into the right way that leads hither. God grant they may persevere in it to the last and escape every inordinate passion and evil habit that might fix a terrene concretion upon them. Those foul remains of our former state, my Search, are exceeding troublesome and a long while before we get entirely rid of them; in the mean time they prove grievous hindrances to us in all our operations both of body and mind. But I have still one anxiety for my children: as they are now women grown they may probably e'er long come into other hands; and what changes that may make in their tenour of life and conduct cannot be foreseen. This, my Riddy, says I, is my greatest difficulty: I cannot help them so well as I would, my knowledge lying more among books than men. Never did I want my Riddy more than at this juncture: you could have assisted me with your counsels: your converse would have given a freer issue to my own thoughts. But I miss you every day at home and abroad, in business and in amusement, in my troubles and my successes. O! that it were permitted to take you down with me to make a paradise again upon earth! O! that I might accompany you here in your improving visits, attend you in your lectures and learn of you

the sciences I used to teach! The laws of this place lay a severe restraint upon the fondness of love, a love pure and innocent, like that David bore Jonathan, surpassing the love of women. My rigid tutor here has forbid me one civil salute: am I not allowed to take your hand, whose soft touch used to steal a thrilling joy into my heart?

At this the dear eyes seemed ready to overflow with tears of joy and love. There came out a taper arm and pretty hand having on one of the fingers the semblance of our wedding ring, that pledge of our plighted troth and seal of our union. I shot forth half a dozen eager arms to take hold of it: and now perhaps had instantly grasped it so fast that nothing could have parted us without disruption of our vehicles, and perhaps the course of fate had been broken, had not that severe, relentless pedagogue, that hard hearted old batchelor, Locke, who never knew the tenderness of love, been too nimble for me. For he darted out a great brawny arm and mutton fist with which he caught up the skin of my vehicle, as one catches up a dog by the nape of his neck, and away we flew with incredible swiftness.

29. As soon as he let me go I began to lament and expostulate after a wofull rate. Prithee, says he, don't pretend to be angry with

with me when you were to blame yourself. Did not you promise me to be more discreet? to make your love pure and angelical? instead of that you have burst out into all the flames and raptures of an earthly passion. I told you we employ our passions here as servants, but never let them become our masters nor slip a moment out of the hand of reason: for the very best of them is not to be trusted. An injudicious love often has the effect of malice. What a wish was there to carry her back with you! Was that your kindness to wish her groveling again in the filthy mire of earth, liable to womanish fears, bodily distempers, infirmities of old age and the hazard of being disabled from ever regaining these blissfull seats? Then you don't consider what an injury you were doing her if I had not prevented you: we have almost cleared her of her concretions, the only one remaining was a little too much fondness for you, and this you would have fixed deeper in her again by your indiscretion. Did not you observe her swimming eyes which showed a womanish weakness stealing upon her? I stand corrected, good Master, says I, and am convinced you favoured my wishes most when you seemed most to thwart them: for I would not do her a prejudice, no not the least momentary hurt for all the pleasures in

the world. But what must the dear creature think of me for leaving her so abruptly? Never trouble yourself about that, says he: she saw plainly enough you could not help it and before this time is sensible I acted kindly: she would presently recover herself and go again to her needlework. Do you apply yourself to improve the state of your own mind: the news of that will be the greatest pleasure you are now capable of giving her and the purer you come up the sooner you will be fit for her company. I perceive you have store of concretions about you and to them were owing your intemperancies: we shall have some work with you when you return and you must undergo some discipline. Do, my boy, while upon earth——strive to lessen the need of it as much as possible. Take my word for it, the practice of virtue, the moderation of all your desires and vigilance against evil habits will save you a great deal of inconvenience, vexation and self-reproach by and by. But I must leave you a moment to send the particulars of our last adventure to Gellius. I see nobody within call-coming down. I shall find somebody or other before I have gone five hundred miles. I'll be with you again presently.

30. Being left alone my thoughts ran again upon the dear object of my wishes. I endeavoured to moderate my fondness with as much care as possible, yet perhaps indulged it a little too freely. While I was in this amusement I felt myself on a sudden seized all over by something hard rough and scorching, a hundred cords seemed to wring me round, a thousand points stuck into my flesh, and I felt rough teeth grinding upon my skin. Ideas of resentment, cruelty, avarice, injustice, lewdness, debauchery, blasphemy, terror, shame, regret and despair poured upon my imagination and pierced me to the very soul. I found myself tempted to all kinds of wickedness, to snatch the bread from the hungry, tear out the bowels of children, pluck out the eyes of my dearest friends, dash out my own brains against a stone, wallow in all the impurities of a brothel, rebell against the throne of heaven and worship the devil. I struggled with all my powers of body and mind to deliver myself from my distresses in both and call up ideas opposite to those that oppressed me. Upon the first effort I found myself relieved, the cause of my grievances was removed, but tho I was free from pain, it left a strange dismay and uneasiness upon my mind. My good friend came up instantly to me. What's the matter? says

he, you seem all over agitation and disorder. God bless me! says I, I never was in such a taking in all my lives. All pain, smart and burnings without, rage, horror, anxiety, despair and torment within. Sure these are not fits occasioned by the terrene concretions. Heaven save me from any more returns of them: I would not undergo such another moment for all the pleasures in the universe. No, no, says he, thank heaven your concretions are not so bad as that. Oh! now I see it. Look yonder: there is the enemy that has done you all this mischief. I looked the way he pointed and saw a black bottled spider as big as myself, sprawling and cuffing with his nasty claws against three or four vehicles who thrust out arms as long again as usual to push him away: however, they managed him pretty easily and drove him before them to some stellar rays that pointed directly down to earth. Pray, says I, what hideous monster is that? The very sight of him tho far off makes me shudder and almost renews the pains I suffered from him. That, says he, is one of those wretched vehicles I told you of before; his name while upon earth was Cesar Borgia. I don't know how he came to stroll up here from the regions of darkness, for they very rarely appear among us. Rarely, says

says I, is too often : I shall be afraid of them as long as I stay here.

My dear good friend, pray never leave me alone again. Don't be frightened, child, says he : we seldom see them ; they are afraid of the rays of light which they know not how to deal with cleverly, and when they do come they never meddle with us : nor would he with you if you had followed my precepts. I am confident now that the moment my back was turned you gave loose to your passion again, for he would never have dared touch you if he had not observed you under some impotence of mind. Therefore for the future keep your desires in order, your reason sound, your mind pure ; and you may defy the devil and all his imps. But how, says I, could he overspread my imagination with such a dreadfull cloud of foul thoughts which never entered there before ? There, says Locke, you had a specimen of the sentient language : I am sorry you took your first lesson under so bad a master. By applying himself close on all sides of you he threw in his own sentiments : twas well you exerted yourself in raising up contrary sentiments, that made him glad to quit you immediately, for those evil spirits feel an envy against every thing better than themselves which encreases their torment. Heaven defend me, says I,
from

from the venom of these spiders. The dread and remembrance of it hangs still upon me. I have no command of my thoughts. I shall never be myself again. Come, says he, let us try what a second lesson under a gentler master will do. We'll endeavour to cure you in the same way by which you were hurt. Come, flatten your side a little that we may have as large a contact as possible. He then applied himself close to my side, and tho' I could discern nothing distinctly for want of skill in the language, I felt such a general gleam of piety, sound reason, benevolence, courage, temperance, cheerfulness, quiet and satisfaction spread over my imagination as dissipated all my troubles and restored me perfectly to myself again. Thank ye, says I, incomparable master, I find you can assist, instruct, reprove, soothe and every thing just as is proper. This is an excellent language when spoken by a good orator: would I could learn to talk like you, or at least to understand your eloquence compleatly so as to let none of it fall to the ground.

31. But now I have the spirit of sobriety upon me, with your permission I would fain receive some instructions which might prevent those mistakes that occasioned my failing in it before. I have always been told that love was a virtue, and tho this be understood

stood in the first place of a general benevolence to all rational creatures, yet I never knew we were restrained from fixing a larger portion of it upon some particular objects. Husbands love your wives, is one precept of the Gospel, and all the Searches of name have recommended an affection to our relations, friends and benefactors. I know this is best exerted in doing them service while they are with us : but are we to forget them as soon as they are gone out of our sight ? or how are we to distinguish the virtue from the passion of love, so as to retain the one without touching upon the other ? Truly, says he, I am not so well qualified to descant upon that particular branch of love which I know you are most solicitous to understand, having never had experience of it myself. I will only say this, that true love of any kind forbears every thing detrimental to the party beloved, and never urges to things inconsistent with the interests of any other kind. But there is Plato yonder, who having composed amorous sonnets in his younger days, knows more of that subject than me ; and as he has a lively imagination, will talk to you in a manner more suitable to your own turn. I can carry you to him if you will : he is not a vast way off, we may be with him soon provided we make haste. I shall be very much obliged

obliged to you, says I, for the favour: I long to see that venerable founder of the Academy. Don't expect, says he, to see a formal old doctor in him: he lived so long at the court of Syracuse in intimate familiarity with the king and ministers there that he is quite a fine gentleman.

32. Pray, says I, is it necessary we should travel so fast as we have done in our journeys hitherto? As my time here is to be short I would willingly make the most of it and not lose the benefit of your conversation upon the way: but though I tried several times to talk to you I could not hear myself speak; for we outstripped the vibrations of ether conveying the sound: I suppose anybody a mile behind might have heard me plainly, for I took notice that the passengers sometimes called to one another as they went along. You mistake the case, says he, for we never travelled so fast as the rays we went upon, and Newton has told you that the vibrations of ether overtake the light. The truth is that you did not speak when you fancied yourself talking, for the swiftness of our motion causing a draught of ether against your sides hindered the play of your vocal fibres, just as a man riding a race horse finds his breath stopped by the wind. As we have gotten a stronger tone to our fibres by exercise

cise we can make ourselves heard notwithstanding : and so perhaps may you too if we abate a little of our pace, but then you must exert yourself as if you were hallooing to somebody at a distance. He then took me by the hand and we went on at a less violent rate than before.

33. As we proceeded I began to try my talent at vociferation wherein I found the more difficulty for having never been used to speak in public, and perhaps had not succeeded at all had I not been conversant with some deaf and inattentive people below who forced me to prepare myself for this exercise which though laborious and painfull for the time left no fatigue or painfullness the moment I desisted : however I made shift to be heard just enough for him to comprehend my meaning. After apologizing for the curiosity natural to the Searches which his goodness hitherto had encouraged me to indulge, I begged to know where lay those regions of darkness wherein he said the unhappy vehicles resided. In the pores and caverns of earths, says he, or the atmospheres surrounding them. For the foggy vapours abounding there a little stupify their faculties and make them less sensible of their torments. When they rise above ground they keep in the nocturnal hemisphere, and if by great chance they

they mount up into ether it is always along the shadowy cone of night, which leaving them exposed to the thick solar effulgence they are buffeted about not knowing which way to go until some of us drive them down again. Pray, says I, are they made like other vehicles? Exactly, says he, and have the same natural powers and faculties that we possess, for nature designed us all for the occupations and enjoyments of this delightful country: but they have debilitated themselves by the vast quantity of terrene concretions worked into them. For these gross particles of heterogeneous matter prick their flesh incessantly like so many needles, feel like worms boring into their vitals, obstruct their circulation thereby raising feverish scorplings and distort their imagination laying it open to all unruly passions and rendring it incapable of a pleasing or a comfortable thought. Imagine only with yourself what a man must suffer who should have thorns buried all over in his body, worms gnawing his entrails, the foulness of a distemper filling his flesh with burning heats and his head with melancholy, frightfull phantoms and horror. Terrible indeed! says I. But you told me that our vehicles lie enclosed in our mortal bodies: how comes it they do not feel inconveniences from their concretions

tions while alive? So they do, says he, sometimes in the mental part: but I told you likewise that the vehicle while enclosed in the body can exercise its functions only where it communicates with some nerve of the outer machine, the rest is covered and kept motionless by the gross body whereto it adheres. But when the percipient soul (to use your words) comes out naked and begins to exert all her powers without external impediment, at every motion she makes she finds the sharp concretions standing cruelly in her way. Just as a child in the womb might bear a load of phlegm upon the lungs without inconvenience, but immediately upon birth when the lungs began to play it would give great pain and trouble. And as volition never ceases working they never cease being tormented: so that the boring worm dieth not and the feverish fire is not quenched. You may remember I told you we abounded in desires but had no wants: their desires are all wants. They are restless and impetuous but never satisfied, always eager in action but to no purpose, perpetually flying from one evil into another as bad. Add to this that instead of alleviating one another's miseries they strive to encrease them: continually in broils and quarrels, actuated solely by envy, spite and rancour; melancholy and distract-

ed

ed with their own thoughts when alone, teased, abused and plagued in one another's company. Do you never, says I, try to deliver them from their concretions? It has been tried, says he, but without effect: for there is no possibility of removing a moral concretion unless the patient will do something to help himself, we can only open the fibres with our needles to give it passage, but he must discharge it at the aperture by an effort of his own. But these poor creatures are so perverse they fight and struggle against us whenever we go to assist them: so we are forced to abandon them to their wretched fate. Does not the thought of their miserable condition, says I, stir up a compassion in you sometimes that abates your enjoyments? I told you before, says he, we never suffer any passion, not even love or pity, to intrude upon us without leave: when there is room for any relief to the distressed we can raise a strong sentiment of compassion to invigorate our endeavours in administering it, but when we know compassion is wholly unavailing, productive of no good to others but of uneasiness to ourselves, we can utterly throw it aside as a weakness. Happy temper! says I. But since I have not attained it permit me to hope that, as you say these wretches have a continual burning fever upon them, the violence

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lence of that will in time unhinge their constitution and deliver them from this loathsome prison. That cannot be, says he. I have told you already that the threads of our composition are so strongly spun nothing can dissolve them before they wear away of themselves at the appointed time: outward accidents may hurt, inward foulnesses distend, distempers may disorder, but none of them can destroy us.

34. What then, says I, is their misery eternal? for I remember you said the disruption of a vehicle was never known before all concretions were entirely purged away. That is a point, says he, which I cannot resolve you with certainty. There are different opinions among us, none founded upon experience of facts: for as we avoid all intercourse with them we know not whether their numbers lessen or no. I can only say their continuance in this condition is very long, at least seventeen hundred years, for it was but t'other day that Nero was seen here kicking among the solar rays trying to raise a combustion by throwing them against one another and so to set the world on fire. But divines generally hold the affirmative. Some heretical doctors maintain that they will be advanced as well as ourselves after a certain period: for they say the disruption of our

vehicles never happening before an entire clearance of the concretions is at most only a negative proof of the contrary, and they do not imagine that any material composition is made to last for ever. Many of the philosophers suppose they will be reinstated in mortal bodies, wherein the distempered parts being kept quiet and motionless, the old concretions will work out of themselves and they will return pure if they do not contract new ones by their ill conduct. However the truth be, their present condition is the same to them as if it were eternal, for they have no prospect or notion of any deliverance, so have not the least glimpse of hope, that last refuge of mortals and cordial for every trouble.

35. What principles then, says I, do your disputants build upon, since they have not the foundation of facts? The Divine Attributes, says he, the only foundation for our reasonings upon matters where experience affords us no lights to direct them. Pray, says I, if I may be so bold, how do the maintainers of the affirmative reconcile their opinion with the divine goodness and mercy? The counsels of God, says he, are unsearchable, even to the most intelligent of creatures, and his Attributes incomprehensible. We agree unanimously that God is equal in his dealings and
righteous

righteous in all his ways, that his goodness is infinite and his mercy over all his works: nevertheless we are sensible that we are not competent judges to determine precisely what belongs to equity, goodness and mercy. Yet thus much we assure ourselves of that the purposes of God never terminate ultimately in evil, neither does he punish in anger nor unless for some greater good to result therefrom. Perhaps we should grow remiss and thoughtless in these scenes of continual ease and delight if we had not those dismal spectacles to rouse and alarm us: perhaps their sufferings are some way or other necessary to secure the happiness of the blessed spirits above. Some young vehicles talk largely of a free will of indifference, but they are little regarded here; for we know of no merit in ourselves, and acknowledge those virtues and happy dispositions of mind which brought us hither to be the pure bounty of heaven: for tho we worked out our own happiness for ourselves, it was God who gave us the powers to work with, the springs and motives determining us to employ them. According to the opinion most generally prevailing we regard the state of these wretches as eternal, never to be remedied by natural causes: nevertheless there is an Almighty Power which can alter the course of nature and may interpose in their

favour, but when or in what manner we do not pretend even to conjecture. Thus as the recovery of fallen man was a mystery even to our predecessors which they desired to look into, so the deliverance of these unhappy victims of divine vengeance remains a mystery with us which we still desire to look into.

36. I thanked my instructor and added, that as this was a melancholy subject I should be glad to divert my thoughts if he pleased during the remainder of our journey with looking about me upon the objects occurring in our passage. I saw travellers passing along upon other solar rays near me on the right hand and the left, others upon stellar rays crossing above, below, before and behind me: and the ethereal fluids running into various commixtures by their perpetual undulations. I beheld the moving scene with more pleasure than a citizen escaped five miles from the hurry of business into a summer house hanging over some dusty turnpike road. I could retire within myself when I pleased and enjoy my thoughts secluded from all external objects, which is more than the citizen can do, for when he has not his senses to entertain him he falls asleep. But my curiosity to make new discoveries soon drew me from this meerly amusing prospect to observe the rays of light as they whisked by me. I
found

found that by carrying my eye along with some of the corpuscles I could discern them pretty distinctly. They appeared to me something like the chain or cross bar shot used in sea engagements, only instead of a bar between, the whole consisted of seven balls flatted on the sides by which they adhered to one another. I wished to see a refraction but could not, so can only suppose their flatness makes them more apt to rejoin when collected by a Lens after refraction and unite again into a white ray. I perceived the vibrations of ether overtake them, and when they were in the back part of a wave their motion was retarded which put them into that state called by Newton their fits of easy reflection; as when in the fore part they were in fits of easy transmission. But my greatest pleasure was to observe the expertness of my conductor: he did not skate with a stump leg, as I had imagined before, but put out a broad foot with which he could have a good flat tread upon the corpuscles, and tho they moved with different velocities according to their fits of reflection or transmission yet he so humoured their motions by the pliancy of his joints as always to take just the force he wanted to direct his step with such exact nicety that when we came over to the opposite ray we never fell into a vacant

space but always close upon some corpuscle which served us for our next step. My curiosity being satisfied my mirth began to operate. Methought I made a very ridiculous figure dangling behind him. I fancied myself like a bone that some unlucky boy has tied to a dogs tail and then turned him into the street. However, my merriment was all to myself, for the passengers, used I suppose to such phenomena, took no more notice of me than we should on meeting a good woman carrying along a child in her arms.

37. While employed in these amusements which entirely dispersed all my gloomy thoughts and gave a cheerful turn to my mind, I found we stopped. There lay a vehicle before us wholly collected within his bag and seeming wrapped in profound meditation. My conductor gave him a gentle tap when presently there came out the honest, open, lively, but sensible countenance and broad shoulders of the first Academic. Hah! says he, my good english cousin Locke, I am always heartily glad to see you. I shall never forget the honour you have done my Ideas by bringing them into greater repute in the Tin Islands than ever I could do in Athens. But who is this honest looking young spark you have gotten with you? Have I ever seen him before? I beg pardon if

if I have forgotten his face. A countryman of mine, says Locke, just arrived among us and a distant relation, of an under branch of the Searches. He is ambitious it seems of imitating my seriousness and your vivacity, and I have made bold to bring him to request a favour of you. With all my heart, says Plato, any thing in the world I can oblige my cousin in. Pray, young Englishman, what are your commands? You must know, says Locke, he is a disconsolate turtle ~~that~~ has lost his mate, and since he cannot get her out of his head he wishes to have a lecture from you upon the subject of love that he may learn to love like a philosopher. The polite founder of the Academy very readily engaged to recollect what he could upon that head that he had learned from his master Socrates.

38. My master, says he, used to tell us there were two Venus's distinguished by the names of Thalassia and Urania. The former sprung from the foam produced in the sea by an oily mud driven into it by torrents. She is compleatly formed for enchanting the eyes of mortals: her cheeks smooth and blooming, her lips moist and pouting, her aspect sprightly and engaging, her round neck and swelling bosom generally bare, her shape neat and elegant, her limbs delicate and

pliant, her vestments loose and flowing brocaded with cooing doves and sportive Cupids. She glides in easy swimming motions or trips lightly along with wanton airs and winning graces. Her eyes are bright and striking but a little short sighted, so she follows the pleasures nearest at hand seeing nothing of those at a distance nor of the pains sometimes close at your elbows. She plays a thousand little artfull tricks, dissembles, casts herself into any form to gain her ends, but incapable of laying an extensive well concerted plan. Urania, heaven-born Fair, offspring of Almighty Jove Father of Gods and men, is his best beloved daughter. She carries a dignity in her aspect blended with mildness and benignity, commanding at once both love and respect. Her motions are gracefull and easy, her deportment majestic and uniform, her cloathing magnificent but not gaudy, being a rich tissue woven of threads covered with two celestial metals called Prepon and Kalon. Her eyes are strong, clear and piercing, tho she follows pleasures too she discerns the remotest on all quarters and counts the pains mingled among them: she looks backward upon the past and forward to the future and extends her influence upon every thing around her. Her face and person cannot be particularly described
because

because she comes down always in a veil, so that mortal eye can scarce obtain a glimpse of her, but tis said if we could fully discern her beauties we should be so enamoured with them as never to think any thing beautifull beside. She was present with her father when he made the worlds and the blessings he poured forth upon them passed thro her hands: she still moves him to shower down his mercies from time to time upon mortals and sollicitis him for leave to descend herself to rescue them from their miseries and errors. But they cannot approach her unless introduced by some inferior Goddess, of whom the Thalassian Venus is best qualified to perform that office; yet neither do the inferior powers take conduct of them upon their entrance into life, nor until arrived at some maturity in their faculties.

39. For when Psyche first falls from the unknown regions she lies helpless and groveling upon the ground; the dust of the earth gathers round her and forms a case which would wrap her in perpetual sleep but that there grow little hairs or stumps of feathers in all parts of it: these being brushed against by external objects and appetites continually rolling over her, prick and stimulate and awaken her out of her lethargy. She then starts up and plays about within a small enclosure

closure furrounding her called the garden of Self. Every thing is new to her, every thing engaging: she admires the wild plants growing there which quickly shoot up large and vigorous stems bearing flowers alluring to her sight and fruit suitable to her taste. If any body controuls or endeavours to guide her motions she resists and frets and breaks from them as soon as possible to run to the gardener Selfish who indulges her desires, finds her abundance of diversions and makes her store of pretty playthings. The last of these is a neat light and easy car to be drawn by two horses called Concupiscible and Irascible, which the gardener takes care to feed and pamper continually with his own hand. With this she courses about the smooth walks of the garden without much damage, only now and then a slight bruise or gentle overturn.

But in a little while the garden gates fly open and Psyche upon her car launches forth into the wide world. She finds an open champaign before her and the passengers obliging to give her way. The horses gambol about without rule or guidance, for she knows not how to manage them but looks back to the gardener upon the foot board behind, who knows as little how to manage as she. He has gotten a basket of his wild fruits with which he wantonly pelts
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the people on each side. They find them harsh to their taste and some are hurt by their hardness. This makes them clamorous upon which the horses are frightened, grow rampant and quickly overturn the car, dragging poor Psyche along until she is torn to pieces unless some conductor luckily step in to her rescue. Happy is she if Thalassian Venus chances to pass that way: the brisk Goddess mounts the Concupiscible horse and with the whip of Desire in her hand keeps them both in tolerable order, making them pull together and singles out some object whereto she drives them in a line. She sends the gardener back to graft learning, politeness and accomplishments upon his wild stocks with orders to bring back the fruits they shall produce which she deals out among the persons near her that they may make way and assist her progress. 'Tis she first opens the heart of Psyche, teaches her obligingness and to look a little beyond herself. Nevertheless the Goddess is apt to change from object to object, or if she fixes upon one, drives so eagerly as not to heed the rotes in the way and sometimes even to hurt the object she pursues: for she aims at pleasure, not at good, and her own pleasure rather than that of others whom she most fondly affects. She plies her whip too furiously

riously upon the horse she rides and urges the other to be mettlesome: so the car hobbles, the clay of satiety clogs the wheels and Psyche is brought again into imminent danger.

Her only refuge now must be in Urania, who never refuses her assistance to those that implore it sincerely. The celestial Power descends into the car, corrects the errors of the sea-born Goddess, takes the whip from her hands, delivers it up to Psyche and instructs her how to handle both that and the reins. She sends the gardener Selfish back again to graft the virtues, for they being exotics in the sublunary climates will not grow out of the earth but must be engrafted upon the wild stocks that nature has thrown up spontaneously; and the stronger those stocks are the more vigorously they flourish. When he has brought her the fruit of these celestial scyons she dismisses him quite, for she will not suffer him to load the car nor Psyche to look behind upon him any more. She purges her visual ray with euphrasie and rue and from the well of life three drops distils and sheds her own benignity upon her. She instructs her to follow good principally, and pleasure only when not interfering with the other. She enlarges her heart, rectifies her judgment, extends her views and teaches her to
distribute

distribute the last brought fruits wherever they may be serviceable. She keeps the postilion Goddess constant to the pursuit of one object, and if that be snatched away by fate, she sometimes, as I find was done in your case, discharges her. She presents its picture to Psyche emblazoned with golden rays by her sister Elpis, but will not let her lament nor sigh over it nor interrupt the distribution of her fruits.

Elpis was the second daughter of Jove: she goes clad in virgin white and has the softest hand of all the Goddesses, for the touch of it soothes the smart of every evil in Pandora's box. She keeps always in the line between her father and the earth, so that who-so turns his face aside from Jove will never have a glimpse of Elpis. The car then rolls tranquil and steady along until they arrive at the gates of the country, which being beset with terrors and ghastly apparitions frightfull to Psyche, the Goddess makes her look back upon the road they have travelled and the people eating the fruits they have distributed. She then beckons to the satin-robed Elpis who lets down a golden anchor: the Goddesses place Psyche thereon, and the elder sister holding her firm while the other pulls the cable, all three mount up into the blessed abodes.

40. When the divine Plato had ended, his voice still chanted in our ears and left the same effects as the charms of poetry upon the imaginations of the whole circle: for several vehicles had gathered round us as soon as they perceived him beginning to open. There was one among them whom I could not but take particular notice of: his nose was flat with wide open nostrils, his features large and hard, his whole face the plainest I ever set eyes on; nevertheless there was such a sensible simplicity, such a good natured humorousness in his countenance that one could not help being prejudiced in his favour. He stared at me, and we surveyed one another for some time. You look at me so wishfully, says the Flatnose, that I fancy Uranian Venus has sent down one of her own Cupids to strike us with a mutual affection. I don't know how you come to be taken with me at first sight, but tis no wonder I am smitten when I see before me the Displayer of the Light of nature, the hope of the Searches, the ripened fruit of our illustrious branch. For every age improves upon the former and the sons successively grow wiser than their fathers. The divine Plato here has put finer words into the mouth of Socrates than ever he could utter himself: your father Locke has refined upon the ideas of Plato; and you like another
Achilles

Achilles have proved yourself a better man than your father. I was abashed grievously at this high flown compliment, and turning to Locke, Pray, says I, is it the fashion in this country to flatter folks out of their senses? I thought you had been all sincerity and plain dealing here. For goodness sake who is this courtly gentleman? Sure it must be one of Dionysius's lords of the bed chamber that Plato has brought with him from Sicily. And now upon a second view methinks he has some features that show as if he did not dislike to have his miss and his bottle. You are not the first, says Locke, that have judged so of him before they knew him. But look at him again and recollect whether you have read a description of somebody you think like him. After taking another survey I cried out to Locke, I'll be pierced if this is not Socrates himself. Oh! now I am more mortified than ever. What's the matter with you? says Locke. Can you desire better than to receive such a testimony from a person whom the oracle has pronounced the wisest man in Greece? No, no, Pappa, says I, I am not such a child neither to be caught so. I have heard enough of his irony and that his words are to be turned topside tother way to understand them. I have not forgotten Elian's story of the horse rolling upon

upon his back. If I had any money in my bag I would lay a hundred guineas now that he sees me to be an errant sophist: for he used to deal with them just in this manner. Phoo! says Locke, so he does with all strangers the first time he accosts them: if they take him in earnest it puts them into prodigious good humour with him; if they see thro the veil it makes them smile and that has the same effect. You had better humour him in his own way, it will draw on the conversation the easier; from whence it is a great chance but you will pick up something worth carrying away.

41. I endeavoured to follow his advice and, plucking up a good courage, turned again to Mr. Flatnose, Pardon me, says I, amiable Socrates, that my eyes were drawn off a moment from contemplating your admirable beauties, but I was willing to consult my patron here how to behave so as to appear most agreeable in your sight: though without asking I might have known better manners than to contradict the person beloved: therefore shall readily acknowledge myself the wisest man that ever lived. And I have good reason for what I say, for you were the wisest before, but the oracle declared you so because you knew no more than one thing which was That you knew nothing:

nothing: now I go a step beyond you, for I don't know whether I know anything or not. I rejoice, says Socrates, that we both value ourselves upon the same account: for conformity of sentiments promises a lasting and cordial love that will not fade. Here I jogged Locke and whispered him, How it would divert our ladies below to hear two such Adonis's talking so sweetly of our reciprocal passion! Oh! says Locke, they don't understand the language of Uranian love any better than we old bachelors did of the Thalassian. Socrates went on, Is not love a flame? I was always, says I, taught so. ---And does not a flame require some fuel to keep it alive?---To be sure, or else it will go out.---Methinks I should be very sorry to have this flame that is lighted between us vanish like a meteor. What fuel shall we find to keep it burning?---I protest I don't know, says I. If I had my Euridice again with me I could find a thousand ways to express my love and foment hers: but this is quite a new sort of amour: I don't know how to proceed in it. ---Does not love, says he, encline one to please the party beloved? and does not that encourage the like flame in the other?---Most of anything that I know of.---Then if you have fallen in love with me, you will do everything to please me?---Yes, very readily. ---If I should ask you to take a skate with me

upon a pair of solar rays, you would do it?---
That I can't, for I have not learnt to go: but
I would if I could.---Well but suppose we
were both upon earth again and I wanted a
peach out of your garden: you would give it
me?---Certainly: you should be heartily wel-
come.---Or a cup of your small beer: you
would call for it?---Instantly.---For no o-
ther reason than because I had a fancy for it?
---No: for I should want none other.---Sup-
pose the Athenians had not condemned me
to drink the Cicuta, but I had taken a fancy
to a draught myself: you would have pro-
cured me a bowl without delay?---No in-
deed: that would be no instance of love I
am sure.---What! not if it pleased my fan-
cy?---Not if it pleased your fancy would I
give you a thing that should destroy you.---
Did not we agree just now that love consists
in doing everything to please the party be-
loved?---We did, but I believe we were
mistaken, and ought to have placed it rather
in the good than the pleasure of the beloved
object.---Well then, says he, as you love me
you will attend always to my good?---To
the best of my skill and ability.---If I was
hungry and desired trash, you would refuse
it and give me wholesome food?---You will
never put me to that trial.---But suppose I
should, what would you do?---I should
show

show my love best by giving you the good victuals.---If I were sick and liked rather to swallow a draught of honey than the medicine proper for me, what would you do?---Get you to take the potion if I could.---Because you would consult solely my good?---Yes, for that reason.---And if the potion were nauseous and I desired a little honey to sweeten it you would refuse it me?---No, that would be meer crossness.---If the physic would do me the same good whether sweetened or not would you give me the honey?---Ay surely.---Why?---To make it less unpleasing to your palate.---But did not we agree last that lovers were always to pursue one another's good and not their pleasure?---You have drawn me into a dilemma, says I, do so much as extricate me out of it again.---I can extricate nothing, says he: I only practise my mothers trade of midwifry to bring your thoughts to the birth; you must deliver them by your own efforts.---I suppose, says I, if the same thing be good and pleasing too we may do it without scruple.---So it should seem, says he, for that agrees with both our positions.

42. But, added he, do not lovers use to take pleasure in pleasing one another?---I can remember the time, says I, when the pleasure of pleasing was my sweetest delight.

---Then if you love me should not you think of something I can do to please you that I may taste some of that sweetest delight?---You can do nothing to please me better than by improving my knowledge in any way you think proper: you know best how to choose.---How can I improve your knowledge when I have none myself but of one thing, that I know nothing?---Then teach me to know the same of myself.---Let us consider first what good it will do you: for you know we have not yet settled whether a lover may please his paramour unless in something that will do him good at the same time.---Well then, tell me what it is good for: you must certainly know better than any other because you were the sole possessor of it.---Nay, don't ask me, you know we agreed that you were the wiser man.---Very true: I had forgot that. To be sure I have a vast deal of wisdom in me but I protest I don't know how to get a crumb of it out.---Then we must try to assist you in the delivery.---Come, Mrs. Lucina, to your office: for you have raised a great rumbling within me, but I can't tell whether it be a true labour or only a wind cholic.---We shall see that presently. Did not you desire me just now to improve your knowledge?---Yes.---And you looked upon the
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the improvement of your knowledge as a good? for the wisest man that ever lived would hardly have desired a thing that was not good for him.---Certainly: for I look upon the attainment of usefull knowledge as the greatest good that can befall a rational creature.---And you think yourself a rational creature?---I hope so: for I can walk along without running against a post and cut my meat without cutting my fingers.---Then you know how to cut your victuals without hurting yourself?---It should seem so, for I practise it morning noon and night.---But tell me, is knowledge improved by learning what we were ignorant of or what we knew before?---What we were ignorant of.---Suppose Hippias, Prodicus, Protagoras, or some other of those great men who understood every thing and made themselves the admiration of all Greece, should come down upon earth to read lectures in Gresham college; and my cousin John Locke should come and tell you, Ned Search, if you will go to Gresham college to day you may hear an excellent lecture upon the art of cutting ones meat without cutting ones fingers. You would go?---No sure: why should I?---Nay, why should you not? 'Tis an excellent art, and saves a man a great deal of smart and inconvenience.---Very true: but I

know that art well enough already : I don't want to be taught it.---But tho' you have this art, yet if you did not know you had it, should you want to be taught it?---Yes certainly.---And if there were any other art you were ignorant of but did not know it, should you want to be taught?---I am afraid not.---Could you learn anything without wanting to be taught it?---Not very well, for if anybody went to teach me I should not attend to them.---And could you improve without learning?---Very indifferently.---Can you improve without first being ignorant of something?---There would be no room for improvement in that case.---Or without knowing you were ignorant of it?---Neither then, for I should fancy myself too wise to learn.---Then is not the knowledge of ones ignorance a necessary step towards improvement?---I see plainly that it is.---Are not all sciences more productive of good fruits the further they extend?---That is a natural consequence.---Then if you could know that you knew nothing should not you always want to be taught?---I suppose so.---And always be ready for improvement whenever it were to be had?---Well, says I, you have delivered me of a hopefull issue, and I beg you will take care to nurse it up well. To say truth I have taken some pains in this science

science of ignorance below and examined myself as carefully to find out what I did not know as what I did. I have made strange discoveries of my ignorance in points where one would least have suspected it, but am afraid there are more behind which I have not yet found out : therefore should take it very kindly if you would teach me the science compleatly.---I cannot teach it, says he : nor can any mortal beside.---Where then did you learn it yourself?---I was divinely inspired.

43. I never knew that before, says I. We were all willing to allow you as much light as human reason can give, but we did not think you pretended to revelations.---Did you never hear that I had a Demon constantly attending me?---Ay, but as we knew you were a joker most of us thought you in jest. The very orthodox divines insisted positively that you dealt with the Devil, that you died an idolater having in your last moments directed the offering of a cock to Esculapius, that your virtues were so many shining sins ; and demonstrated from thence that the very best of heathens were under the power of Satan. Those who entertained the most favourable opinion of you could never believe you in earnest, for none of us but would be frightened at the thought of having such an

imp at his elbow.---I am surprized, says he, you should be so much afraid of them. Are they not common among you?---So uncommon I don't know anybody that ever saw one.---Strange! It was the current persuasion among the Searches in my time that Jove sent down his guardian Demon to every man to protect and warn him against mischief. Do you never hear their voices?---Never myself: nor did I ever meet a man in his senses who said he had. I know a madman who sees and hears them too very frequently.---Recollect yourself. Did you never meet with a person when most in his sober senses, who after having acted very wrong complained that something upbraided and stung and pricked him sorely?-----Here Locke whispered me. Don't you understand him now? I think I do, says I, but not perfectly. Then turning to Socrates I said. Now you put me in mind of it I have heard of such things and our doctors tell us from the pulpit that they happen very frequently.---And do you think, says he, the Demon gives these prickings only to torment the patient, or for his benefit to make him take better heed for the future to its first admonitions when he is going to do a wrong thing? — For the latter cause. — Then why should you think him an imp of Satan? would Satan do any-
thing

thing to overthrow his own kingdom?—We are told not, upon the best authority. — Should you not rather esteem him a faithfull monitor sent by Jove in kindness to mortals? —I see no reason against it. But some I have heard of play him a scurvy trick, for they fear their flesh with a hot iron which makes it insensible to his prickings.—Did you ever know them get any good by this trick?—Never, for they always run into grievous disorders or drew themselves into inextricable mischiefs.— But you yourself, when you have been eagerly set upon some fancy, did you never hear a secret whispering that you had better desist? —Many a time.—And in the course of your meditations when some thought has come strongly upon you with the glare of a demonstration, have you never perceived the like whisper to beware? —More than once. —What did you do thereupon?—Revise it more carefully.—And what was the consequence? —Either I discovered it to be fallacious or found some better bottom to build it upon.— And when in pursuing the light of nature you have stooped down to pick up something very shining, have you not heard the still voice pronounce the words Offence or Dangerous? —Yes, and have suppressed many things upon that admonition, and perhaps should have suppressed more had I as quick an ear to hear the voice as you.

44. But I have some doubt, continued I, whether I know the right voice from all others, because it seems to speak to me in a different manner from what it used to you. I cannot think myself more highly favoured by Heaven than you, although you were never christened according—Hush! hush! The Demon whispers Offence.—Then I must suppress something.—And yet my Demon seems to be more friendly than yours: for that only dissuaded and never impelled you to anything; but sometimes when a laudable action has occurred to my thoughts and a humour of indolence has withholden me from entering upon it, the Demon has instigated and never left me quiet till I bestirred myself.—Should you not have bestirred yourself without him if that humour of indolence had not stood in the way?—I suppose I should.—Then did he need do anything more than dissuade you from indulging that humour?—Why no, as you say, I think he did not need. But what then impelled me to the action?—Might it not be some inclination or appetite?—I flatter myself it was a virtue, but virtue cannot be the same with appetite because its office lies in controuling and restraining them.—Do you remember what the divine Plato told you just now? Very well: I have not lost a word of it.—Did not he say

the virtues grew out of the wild stocks thrown up by nature?—He did.—And may not the grafts partake something of the stocks that nourish them?—So the gardeners agree.—Then may not the virtues grow into appetites?—I don't know. . That seems too hasty a conclusion.—Did you never hear of a hunger and thirst after righteousness?—Yes, *ex Cathedra*.—Are not hunger and thirst appetites?—Undoubtedly.—And are not that hunger and thirst virtues?—That nobody can deny.—Did not Plato tell you that *Thalassian Venus* grafted many scyons upon the wild stocks in *Psyche's* garden?—I remember it very well.—And *Urania* grafted more?—He said that too.—And you allow that after taking strong hold of the stocks they become appetites?—We may allow that of the rest as well as the hunger and thirst you mentioned.—Then *Psyche* having so many appetites, natural and acquired, need never want a whet to action of every kind.—Why no, it should seem she need not.—Did you never know these last mentioned scyons run luxuriant and shoot into extravagancies?—We have numberless instances of that below in our methodists, devotees and very sentimental super-refined ladies.—But tell me now from your own experience, for you have some of these scyons in your own garden.—Some
few

few, I hope, but feeble enough, God knows.

—Well but feeble as they are did you never observe them sprouting into an extravagance?

—Sometimes, to my shame be it spoken.---

What do you think put you upon observing it?—The whispers of the Demon.---

Since we have agreed there is such continual incitement to action of all kinds by the appetites what has the Demon left to do unless to dissuade when any of them urge to things improper?—Nothing else that I know of.

But now you have convinced me there are several voices within us, how shall I know the voice of appetite from that of the Demon?----Did you never perceive a difference in the voices you hear?—One recommends to good, the other to pleasure.——That's not it: for good and pleasure are sometimes the same, and appetite often urges to good. But don't you perceive the voice is sometimes quick, eager, vehement and clamorous, at others sedate, soft and gentle; that sometimes it impells to gratification, at others checks and restrains? And do not you think these the proper marks to distinguish between them?

45. But come now, answer me once more. Do you remember when the Thalassian Cupids sported round you before they were disciplined in the school of Hymen?—Ay,

as well as if it were yesterday.——In those days if you chanced to walk in the Park and were told Euridice was there, have you not sometimes run eagerly after some other person at a distance dressed like her?—Those accidents would happen now and then.——And after the Uranian Cupids came to inspire you with a love of mankind, have not you run almost as eagerly after some shining truth that appeared self-evident?——Many a time and oft.---Or to come with the force of demonstration?—Yes.---Or some usefull and important discovery?—Ay and that too.---And in those cases did you never hear the whisper?----Several times.----You said that upon such admonitions you revise the thought over again. What follows thereupon?—Generally I find the appearance fallacious or the discovery trifling.—But before the whisper you knew the truth, the demonstration and the use for certain?—As certainly as any Knowal.—And after the revival you knew that you did not know it.—I did.—Then since you have this way to learn the science of ignorance why do you come to me to teach you, and not rather apply to the heaven-born Teacher sent down on purpose from Jove?—I see, says I, you have a very peculiar turn: you won't give a man a drop of drink if he be ever so dry, but you lead one round

round through a number of intricate mazes to the fountain where one may quench one's thirst.

But I want your assistance upon occasion of a voice I hear just now.—Which sort was it?—Oh! the eager and clamorous.—What did it say?—That I should make a visit to the Founder.—What says the still voice?—Something, but I cannot tell what.—Can't you tell whether it says Forbear?—No, that's not the word I'm sure: nor can I make out any other.—Shall I try my Demon? They all speak the same language tho they are not equally heard by everybody. Oh! now I have it.—Well, what does yours say?—Mine says Listen.—Oh! that is that we should be attentive not to drop a word of anything the Master delivers.—No, That would have come from the other voice. You know the Demon never impells but only checks.—What does he mean then by Listen?—That you should not pick up every thing delivered, but listen carefully to himself in case he should whisper the word Offence.—I'll do as well as I can, but sometimes my ears are little dinny. Oh! now I hear the loud voice again urging me to go this minute.—What says the other?—He is quite silent.—So is mine: therefore get ye gone, there is no time to lose.—But won't you

you go with me? I am loth to lose your agreeable company. — The Demon won't let me, but he gives my scholar leave: he has an interest with the Master by means of his disciple Timæus. — Then Plato offered his service in the politest manner, imaginable: Locke took me in tow, and after taking an amorous leave with By'e sweet Socrates, and By'e little Searchy, remember me and my Demon when you go down to earth again; we parted to set out for the school of the Samian sage.

46. My conductors informed me as we went along that Pythagoras generally resides in the intermundane spaces for the convenience of hearing the music of the several spheres on all sides of him in full concert: but he was now come down upon some particular occasion below the orbit of Mars, so we should not have a great way to go. This was all the discourse they had with me upon the road, for the rest of the way they entertained one another. I could not hear the particulars of their conversation but found it turned upon forms and ideas, which Plato seemed to hold as unproduced and existent from all eternity in the Divine Mind; and that the forms in bodies and ideas in created minds were copies of those archetypes, similar to impressions made in wax by a stamp.

Locke

Locke could not admit them to be unproduced for that he said implied two principles, an unsentient nature to whose impressions the Deity must be passive: nor could he conceive that every time a man moulded a round piece of wax into a square, or entertained ideas of theft, adultery or murder, these alterations were impressions made from archetypes in the divine mind. Their debate was carried on in a friendly manner without the least warmth or acrimony, and at last they agreed those subjects were too deep for them to fathom. They then praised God who had given his several creatures capacities sufficient for their respective uses, if they would but make a good use of them, and placed out of their reach only such points as were merely speculative.

Scarce had they made this reflection before we arrived at the place of our destination. We beheld the venerable father of Philosophy dictating his precepts to a crowded audience with the authority of a magistrate. He appeared in a human form, like that the painters have drawn for Olympian Jupiter: his locks rising in large curls, his eye brows thick and dark, his aspect majestic with the solemnity and mysteriousness of one who had been used to govern an ignorant and barbarous people. I looked earnestly for his golden thigh

thigh but his robes, made I suppose of aerial woof, covering him quite down to the feet, I could not so much as see whether he had a golden toe. On Plato appearing the obsequious crowd gave way, and he whispered Timæus that here was a stranger just arrived extraordinarily from earth, whose stay was very short, who had come upon the recommendation of Socrates the son of Sophroniscus with an earnest and humble desire to receive some sprinklings of his wisdom to carry down for the benefit of mortals below. As soon as Timæus delivered his message the sage gave a gracious nod, like that wherewith Jupiter shook Olympus on granting the request of Thetis, and with something like a smile began.

47. Adore the sacred Quaternion: the Quaternion containeth under it One, Two and Three, but One, Two, Three and Four compose Ten, and from Tens are all higher numbers produced. The Quaternion Four alone is One and uncompounded. One had no father, but One produced numbers, and numbers are all things. One is unchangeable, but numbers generate numbers, they fluctuate and migrate into one another: yet they perish not, neither was there a time when they were not. Whatever creepeth or walketh or swimmeth or flieth or thinketh

was produced by the first numbers, and the first numbers subsisted by the power of One.

Hearken to me for I am ancient; I was Panthoides Euphorbus at the Trojan war slain by Menelaus fighting in defence of my country; yet he could not destroy me nor hurt my country, neither remove me from it. I have known all things except One, but One is inscrutable.

Revere the Oath, for the Oath cometh from One and bindeth all things: it cannot be broken, neither is it good that it should be broken.

Stand firm upon the golden thigh: let that be thy support: nevertheless use also the thigh of flesh when thou goest forth among men.

Purify the ears of thine understanding that thou mayst hear the music of the spheres, for their harmony is melodious to the adepts, but the vulgar hear not their sound.

Worship the immortal Gods according to the rites of thy country: for the same Gods made the wise and the ignorant, and thou thyself if thou hast a thigh of gold hast also another of flesh, neither livest thou for thyself nor by thyself.

48. The gaping crowd listened with a kind of stupid astonishment. Some still held their mouths open as if not knowing whether the Master had done or not. Timæus,

Charondas,

Charondas, Zamolxis and the adepts seemed all the while thinking on something else. Plato, like a compleat courtier, joined with the many in expressions of wonder and admiration. And Locke, having observed something in my countenance that excited him strongly to laughter, was forced to draw in his head a moment for fear of scandalizing the company. But as the vehicles have a great command over their imagination he very soon thrust it out again and asked me with a very grave face, Whether I did not find myself prodigiously illumined. Illumined! says I, ay, with such a glare as dazzles me quite, for I can see nothing. I am as much mortified now as when Socrates plaid me off with his irony. Certainly great grand pappa fees I am a degenerate brat not fit to be trusted with a little common sence, that he puts me off with his Rosycrucian jargon. Why I know no more what he has been talking about than the man in the Moon. Oh! says Locke, this is only the bark: perhaps we may get the pith by and by. He always talks mysteriously till he knows people very well. I fancy they have given him an imperfect account of you: but I'll try to get speech with him if I can to set matters right.

He then by the interposition of Plato and Timæus requested a private audience. The

Master bared his bosom that Locke might apply his vehicle and they had a conference together in the sentient language: after which the Master, first mumbling a few words to himself, such as, Light of nature! microscopes! Mundane soul! One self-existent! cried out with a loud voice. Hence ye profane. Let not the uninitiated approach the sacred mysteries. Ye that are pure in heart and clean in hands draw near; that have kept the five years silence: that have lifted up your minds above the earth upon the wings of contemplation: that have cleansed your mental eye from the films of superstition and obstructions of self-conceit, so that it can bear to look against the light.

Come, says Locke, now we may expect something a little more intelligible: he always makes this preface before he brings out his esoterics. As soon as this edict was pronounced I perceived a great bustle among the company: all who were conscious of not being adepts slunk away one after another and our number dwindled strangely. Seeing some of great repute below both for learning and piety march off, and fancying somebody whispered the words Mallebranche, Dacier, Practice of piety, Beveridge Whole duty of man, as they passed, I thought it decent to withdraw

withdraw too; but it was out of my power, for having not yet learned to go I was forced to lie wherever my nurse laid me down. Locke observed my perplexity. Prithee, says he, don't be disturbed: this lecture is on purpose for you. I told him you had kept more than a five years silence having never spoken till you were above fifty years old: that you had conversed with bigots and freethinkers without being perverted by either, and that you had been initiated in the mysteries. Thank ye, says I: but I wish you could prove your words true. Hush! quoth he, the oracle begins to break forth.

49. Attend and learn. The Quaternion is the holy Tetragrammaton, the same lawfull name variously pronounced among the sons of men: whether Jeva, Isis, Jove, ~~Zeos~~, Zeus, or Deus; or in modern times, Tien, Alla, Dios, Idio, Dieu or Lord; for these are all Tetragrammata. I speak not of Olympian nor Dodonean Jove nor him the son of Chronos, but of the Uranian whose offspring Chronos was. Uranian Jove alone is One, unproduced, without father, containing all powers within himself. All things beside are numbers: the Mundane soul is a multitude: the immortal Gods are portions thereof: the bodies thou seest are divisible into numberless atoms: men and animals are

the divine particles mingled with lumps of clay: our vehicles contain a number of threads and fibres.

Jove produced the two first numbers, the Mundane soul and Hyle: he made Hyle inert and stupid, but to the Mundane soul he gave activity and understanding. They both depend on him for their Being and subsistence, nevertheless there was not a time, when they were not: for an effect may be as old as the cause, yea must be as old as the concurrence of all the causes requisite to produce it. Their production cost Jove no time nor trouble, nor did he from everlasting want power to produce them. Love or glory moved him to work, but Jove is unchangeable, nor has there been a moment in all eternity wherein he was destitute of love or glory. Those two first numbers extend throughout all the immensity of the universe, but Hyle bears no greater proportion therein to Soul than the drops in a cyathus to the waters of the ocean.

Jove from everlasting disposed Hyle into certain characters expressive of his Will, which the Mundane soul reading therein gathered the portions of Hyle dispersed up and down into regular systems and worlds, formed thereout organizations of men, animals, insects and plants, and lodged in each
of

of them a particle of its own substance. Hence it is that men and animals perceive and see and feel and act: for Hyle however nicely arranged can neither perceive nor act, but the particle of divine air enclosed therein perceives and acts according to the objects exhibited and instruments at hand for it to employ.

The Mundane soul is homogeneous throughout, therefore the divine particles drawn from thence have all intrinsically the same nature and stand differently capacitated according to the finer or groffer contextures of Hyle investing them: for the various degrees of percipience, sense or rationality arise from the action of Hyle upon them. If thou doubtest of this, consider what the brightest genius could do confined within the dull organs of an oyster: why then shouldest thou impute the stupidity of the oyster to its natural incapacity rather than to the darkness of the habitation wherein it dwells? or how canst thou pronounce what the sentient principle of the oyster might not perceive if it had all the ideas of a man to survey? In plants there are channels of perception but no instruments of volition, so their activity lies dormant in them: neither do they feel pain upon amputation of their limbs, for pain would be useless as warning them against

mischiefs they cannot avoid. And they have different mundane particles in the several parts of their composition, so that there may be one for every offset planted from them.

But thou, O man, who prindest thyself upon thy reason and expectest to be raised one day to the intelligence of an angel, wilt not conceive that a creature like thee can be debased to the condition of an insect or a vegetable. Reflect with thyself what thou art when asleep, how little better than a stone, insensible and motionless like that. What wert thou in the cradle? sleeping feeding and crying, with less signs of rationality than the brutes thou despisest. What wert thou in the womb? growing like a plant from the umbilical root and receiving a few perceptions but performing nothing. The modern discoveries of animalcules by the microscope show that before conception thou wert a little frisking worm of less consequence in nature than the pismire and the mite.

50. The Mundane soul read in the characters inscribed by Jove that there should be various states of life, various forms of Being, and prepared and sustaineth them accordingly: some with a mixture of evil and some yielding nothing else. Individuals change, but the species remain constantly the same: and as the systems they inhabit are broken up
others

others are formed for their reception. The divine particles migrate from the Mundane soul into those states, each taking his turn in rotation that the fate of all may be equal: and he that passes thro' a more inconvenient state at one migration takes the better at another. But as the particles in the Mundane soul are infinitely more numerous than those immersed in Hyle they pass millions of years before it comes to their turn to migrate again, and all that interval they remain happy and immortal. For tho' the continuance in some of these states be an eternity to the spirits inhabiting them, who know nothing of their Pre-existence and scarce anything of their Post-existence, yet the Mundane soul, to whom a thousand years appear as one day, looks upon these migrations no more as a suspension of its immortality than a man esteems the suspension of enjoyments by a night's sleep a discontinuance of his life. Thus life is a journey thro' the vale of mortality, but the deliverance from Hyle a return home and resurrection to immortality again.

Therefore the Mundane soul, having found permission in the characters written by Jove, contrived to shorten the passage thro' Hyle as much as possible: many children escape from the cradle, and bringing no concretions into the

the

the vehicular state, obtain their advancement the sooner: many fœtuses never come to the birth, and multitudes of animalcules never arrive to the stage of a fœtus: these all regain their native seats directly without passing thro any other forms. The migration is not out of one species into another, but each species contains several stages: for the divine particle or Psyche, upon being first discerped from the Mundane soul to immerge into Hyle, receives a fine integument thereof; wherewith being enveloped she becomes an animalcule. This is her first stage, and many times the integument bursts before she arrives at any other: if it does not she roams about until she finds a proper nidus wherein she nestles, whereto adhering and uniting as a part of the same composition she becomes an egg or a fœtus, and the fœtus being in due time excluded becomes an animal. If the nidus being young, the adhesion close and strong, it chances to be dissolved by some disease or accident, it tears open the fine integument too and sets Psyche at liberty: but if the animal holds out its period of life the integument gradually loosens and disengages itself from the gross outer covering and upon dissolution thereof issues forth entire but a little altered in its contexture and distended so as to be incapable of re-entring a nidus of the same or
any

any other species, and remains naked without any covering of the grosser Hyle for an appointed time, which is the last stage of the journey. But in whatever stage the first integument breaks asunder Psyche becomes re-absorbed into the ocean from whence she sprung. Therefore the most desirable thing for Psyche would be not to have been born at all, and the next desirable to have died as soon as born.

Nor think thou, vain man, that thine is the most favoured state, or that thou alone hast an interest in futurity. Knowest thou not that some animals drag on a life of labour, pain, distress and misery? which thou canst not say they brought upon themselves by the abuse of their indifference; for this thou claimest as a privilege peculiar to thyself. Does not then the justice, the equity, the goodness of Jove require that amends should be made them elsewhere? Psyche wishes most to pass through the species of short lived animals that her return may be the sooner: therefore the Mundane soul has provided infinitely greater multitudes of them than of the human and longevous. Thus Psyche has many short excursions to one long journey: for she must migrate successively through the several species of insects animals and men,
savage

savage or civilized, but after immense intervals between each migration.

51. I was Panthoides Euphorbus who fought in the Trojan war: not that sung by Homer, but another in another world innumerable ages before. The spear of the younger Atrides could not destroy nor remove me from my country, but advanced me one step towards it: for my country is the Mundane soul. During my long residence there I contemplated the Universe: I surveyed the systems, their order and courses: mine eye penetrated into the minute portions of Hyle, their properties and operations. I comprehended all things, all except the One: but the One is inscrutable, dwelling in unaccessible light, whither the intelligence of numbers cannot approach. Nevertheless I beheld clearly the image of his splendour in the characters marked upon Hyle, in the powers and excellencies of the Mundane substance around me.

52. Reverence the Oath, for it is the Oath of Jove. Hast thou not heard how Jove made a covenant with man, that day and night, summer and winter, seed-time and harvest should never fail. This is but one article of the covenant which the One made from everlasting with the first numbers: and he confirmed it with an oath; but having
none

none greater to swear by he sware by himself. As I live, saith the One, my order of succession shall not fail, neither shall my words pass away. Am I a man that I should change or the son of man that I should repent? Behold now, the laws of nature which I have established, they shall not be broken: the mazes of fortune I have planned out, they shall not be obstructed: the measures of good and evil which I have set, they shall not be altered. Systems shall be formed and dissolved again each succeeding the other: various forms of Being provided, the number and length of their stages with every thing befalling in them duly regulated by the courses of nature and fortune: the Mundane substance assigned its proper migrations after stated intervals.

If I interspersed a small portion of evil among my works it is for the greater good to redound therefrom: for as I live, saith the One, I have no pleasure in the sufferings of my Numbers, but that they should enjoy and praise me for their Being. I have contrived my Order in wisdom and loving kindness and directed my second causes to operate ultimately for their benefit. This my percipient first number knoweth and obeyeth my voice gladly. When Psyche lies immerse deepest in Hyle I afford her such lights through the
chinks

chinks of sense and appetite as direct her to serve my purposes unknowingly : if I open the windows of reason then Psyche can discern good and evil and I leave it in her power to choose between them ; nevertheless however she shall choose she cannot defeat my designs, but promotes them when she least intends it, for I compass them secretly by ways she knows not of. I govern all things above and below, Hyle by impulse, the Mundane soul by understanding and motives : I know certainly how every cause will operate, so that nothing falls out contrary to my Will. I have reserved the dispensation of evil to myself, for I alone know how to produce good out of it : let not Psyche presume to interfere with my prerogative.

If any provision of nature terminate ultimately in evil I will interpose in due time with my almighty power for the deliverance of Psyche : but let her beware how she brings evil upon herself or her fellows, for tho' offences must needs come, woe be to them by whom they come ; for I have marked out a secret path in the courses of nature by which Nemesis shall overtake them and overwhelm them with greater evils than they have occasioned ; and the slower the steps of Nemesis are, the larger flood will she gather. Attend, O Psyche, to the terms of my Oath : where thou standest

standest them not I will not be severe to mark what is amiss, I will even bring strength out of thy weakness, wisdom out of thy foolishness, and success out of thy misconduct; but where thou discernest whither they direct, Reverence and Obey, lest mischief come upon thee.

53. Thus said the One: and it behoves Psyche to observe diligently what nature requires, especially her own nature, and examine to what uses her several faculties are applicable. The faculty of reason she will find eminently precious and solid above the rest, as gold is above other metals. This then is the golden thigh whereon only thou mayst stand firmly: let this therefore be the support of thy meditations, the basis of thy conduct, the pillar whereon thou raisest thy schemes: nevertheless when thou goest forth into the world use also thy thigh of flesh, that thou mayst walk with freedom and conform thyself to the motions of others.

When retired from the noisy world thou standest upon thy golden thigh thou mayst contemplate the regularity of the heavenly systems, their complicated motions, swift and slow, making an admirable harmony, singing forth the praises and magnificence of Jove. Thou mayst then turn thine ears upon earth and observe how the discordant passions,

fions, jarring interests and opposite views of men combine to maintain order in communities and work agreement out of that which seemed the most unlikely to produce it. Thou mayst attend to the windings of fortune wherein events appearing the most harsh and grating to your wishes often terminate in a perfect concord and unexpectedly bring on a close most contenting to the mind.

54. Worship the immortal Gods according to the rites of thy country: let this be thy general rule, nor admit thou exceptions without urgent cause. Rites are indifferent in themselves and may be turned as well to good as bad purposes: popular doctrines are for the most part figurative and may by proper interpretation be accommodated to sound reason. The same Jove made the adept and the ignorant; he careth equally for all his works; he gave forms and ceremonies to the vulgar: do not despise what thou thinkest needless to thyself. Yet neither be they wholly needless even to thee, for if thou hast a thigh of gold thou hast also another of flesh, a vulgar part in thy composition: nor is it given to mortal Psyche to guide all her steps by reason alone. Remember thou livest not by thyself nor for thyself: if thou hast knowledge keep to thyself that which would hurt another: dispense to every one discreetly what will do
him

him benefit, and in a manner he can understand and relish: delight not to thwart the conceptions of others, but turn them gently the way that will be most advantageous to them: neither regard the Lawfull only, but also the Expedient.

55. The Master then withdrew himself into his vehicle gathering his vestments around him; so that he looked like a port-manteau lying under a heap of cloaths. Plato, after making a handsome compliment to Timæus for his good offices, told us we had nothing more to do but return home again. So we set off directly, and as I expressed a desire of conversing with them upon the way, they contrived a method of carrying me by which I might do it more commodiously: for taking me each under one arm they placed me in the middle on a level with themselves. In this manner we went on, all three making one compact body with two legs only for steerage of the whole: Plato skated upon the right hand ray and Locke upon the left. I asked Locke whether he intended to send down all he had heard to Gellius. Ay, to be sure, says he. Why not? Nay, says I, only because I thought two or three times while the Master was speaking that the Demon whispered Offence. Well then, says he, tell me those passages where you heard the whis-

per and we will leave them out. Come, why don't you begin? I was going, says I, but he checked me again. I don't know what to do he puzzles me so with contradictory directions. 'Tis my opinion, says Locke, that we send all down, but that you reserve them for your private use until you can get some friends to consult their Demons, who perhaps may be more explicit. Oh! now, says I, he says Listen. Very well, says Locke, that is a sign we are to follow our impulse for the present, only holding ourselves upon the watch for future admonitions.

56. I then desired, the Demon not forbidding, to know whether I might not be introduced to some of the Apostles. No, says Locke, that you cannot, for they having gone through severe trials below, were all advanced long before I came up. Perhaps my partner may tell you something of them. They did not much care to converse with us, says Plato, for they could not quite get rid of that shyness remaining from the notion they had first entertained below of our being reprobates and unclean before Peter's vision of the sheet taught them otherwise. The last who staid was the Cilician of Tarsus, detained by some acrimonious concretions he had contracted before his initiation. He could not help

help sometimes cursing and calling names: if anybody vexed him he would say, Thou hast done me much wrong, the Lord reward thee according to thy doings; or at other times, God smite thee thou whited wall. Upon one of us asking him civilly to explain what was a spiritual body, he replied, Thou fool, that which thou soweest is not quickened except it die. I tell thee there is a natural body and there is a spiritual body.

He had great knowledge but no very happy facility in expressing himself; so though he was fond of disputing among us we were very little edified, for he talked in a language peculiar to himself; till we put him in mind of his own rule, Become all things to all men, if by any means thou mayst gain some: he then began to conform himself to our ideas and figures, and when we could understand him we learned a great deal from him. He then owned that he had received heavenly gifts in earthen vessels, and though the liquor was not at all impaired thereby in substance or virtue, it might get some twang of the vessel. His education at the feet of Gamaliel led him and the general taste of his countrymen obliged him to deal in far-fetched extravagant figures, which as that taste subsided lost all resemblance with the

things signified, but were understood literally, thereby leading men quite wide of his meaning, involving them in useleſs ſubtilties, inextricable difficulties and endleſs diſputes. If he had ſtaid among us till my brother Locke here came up he would certainly have been a great favourite with him. I am perſuaded he would have ſaid nobody underſtood him ſo well ſince his own immediate ſcholars.

I flatter myſelf he would not have diſapproved the thoughts I delivered when you firſt did me the honour to conſult me. Perhaps he might have enlarged a little further, for beſides the two celeftial Goddeſſes I ſpoke of he would have added two more, a pair of twins named Eiſorofis and Piſtis. Eiſorofis, he ſaid, remained always above to attend upon the Gods, and Piſtis always below to ſuccour mortal Psyche. She was of enormous ſtrength, capable to remove mountains; and invincible courage, ſo as to paſs through fire and endure tortures without changing countenance. When the car was overturned and Psyche dragged amongſt briars, ſtones and mire, he ſaid no other power could reſcue her beſides Piſtis; for Urania would not deſcend unleſs called by her. While Psyche holds faſt upon her, no perils can hurt, no terrors diſmay her. She carries an Eiſoptron which,

which, whenever Psyche looks too earnestly upon the ground, she holds under her and gives her by reflection therein a glimpse of the Glories above. He would not have omitted the golden anchor, only differed a little from us in the shape, for he said it was made like a cross, such as was used for the execution of malefactors, and that the three Goddesses mounting Psyche thereon proceeded with her through the Vehicular regions until they came to the gates of Heaven; where Elpis and Piftis, delivering over their charge to Eisorosis, descended again, but Urania entered with her into the blessed abodes. This Piftis was a great favourite of his, and he lamented grievously on hearing accounts from below that mankind had worshipped a counterfeited in her stead.

This Pseudo-piftis was a most furious power, imperious, violent and cruel, carrying scourges, swords and firebrands to take vengeance of any that but dared to cast a disrespectful look upon her. She showed frightful images of dungeons, flames and spectres in her Eisoron, and while Psyche was terrified in looking at them, she picked her pocket and sometimes stripped the cloaths off her back. She practised a thousand frantic tricks and absurdities till she became a laughing-stock to the scoffers. He said she might

easily be distinguished from the genuine, being always accompanied by ambition, tyranny, vanity, avarice, luxury or some of the infernal train : whereas the true Piftis never appeared far asunder from Urania. And she did everything by dint of arbitrary command, obligation, fear and terror : whereas the real Piftis employed fear only as an instrument to work the beginning of wisdom, but when Urania took possession of the car fear was banished quite away. What then, asked I, do you think he would have said of our modern methodists who pretend to quote him for their assertion that provided a man believes himself one of the elect it is not a farthing matter what his morals are? Perhaps, replied Plato, he would have answered Thou fool, knowest thou not that faith is manifested by works, as the tree by its fruit? and that health of mind as well as body is preserved sound by constant exercise of outward actions? Socrates used to be much delighted with his description of the Uranian Venus. I don't doubt but you remember it. Pray, says I to Locke, where is that. In the thirteenth to the Corinthians, says he.

57. The obliging Gentleman-philosopher proceeded to some other of his doctrines which he explained after his own manner :
but

but the ancient stile and philosophy differing a little from the modern, I could not always comprehend him, till Locke explained them further in a manner accommodated to the present Theory. I would gladly relate what was said by them both, for the Cilician doctrines interpreted by philosophers cannot fail of being very curious and instructive: but to my great regret I cannot recollect it yet. For Gellius, finding my sensory fill apace and not knowing how much more there might be to come, interlined these discourses, which he, being a heathen and a man of weak judgment, looked upon as matters of no great importance, in very small characters between the former writing: so that the inner membrane I carried with me being not yet fallen into the fine strokes of these little letters, I cannot possibly read them. But perhaps some time or other it may have worked in so that I may discern them plain enough, if not to transcribe, at least to recover the main sense and substance of them.

The next legible writing recounts that Locke and I, having dropped Plato at the Grecian quarter, came back to the place from whence we set out. As we passed along, after thanking my patron for the favours he had procured for me from the ancient sages, I added, that if it was not trespassing too much

upon his goodness I would beg an introduction to one of the moderns. Whom would you see? says he. There are but few of them within reach: for being new inhabitants here they are gone to visit the regions round about; as your young gentlemen below are exhorted to travel for the finishing part of their education. Newton is run after the great comet that appeared in 1685 to try the justness of his calculations upon its trajectory. Huygens has undertaken a longer journey to measure the distance, magnitude and brightness of the Dog-star. Theory Burnet set out upon a visit to Jupiter as being an earth in its antediluvian state. He wants to peep into the great hole Astronomers observe there, in hopes of seeing the great abyss beneath and remarking how the earth stands in the water and out of the water. He then goes to Saturn to examine whether the ring be not a part of the paradisiacal crust not yet broken in. Whiston is engaged in a wild-goose chase among all the comets to find which of them will bring on the conflagration, that he may calculate precisely in what year the Millennium begins, wherein he is to be chief Messenger, Arch-bishop, Metropolitan and Primate of all the new earth. And the rest, almost all, are dispersed abroad one way or other in quest of some discovery hitting their fancy. Oh!

says

says I, it was none of those you named: tho' I should like well enough to have a conversation with them, but we shall not have time for everything. The person I thought of was the famous German professor Stahl. That's lucky, says Locke, for he being of very heavy flegmatic temperament has not learned to go yet, so we shall be sure of finding him at home.

But what can you want with him? Sure you don't design to study Physic at these years. No, no, says I. I know more of that science than Socrates's one thing, and if I should dabble in it now I might lose that single point of knowledge and chance to quack myself into distempers. But as he has joined natural philosophy with medicine I was curious to try whether some improvements might not be gotten from him, and have read so much of his True medical Theory as relates to subjects in my way; as likewise his controversial tract entitled the Idle Business alias the Shadow-fight: but can make neither head nor tail of them. Yet I am the less mortified because I find other people cannot agree what his opinions were, and therefore some of them must have misunderstood him. Boerhave makes him hold that the mother's imagination forms the fœtus. Hartley that the fœtus forms itself, and
that

that all our automatic motions were originally voluntary actions of the child. His antagonist in the Shadow-fight charges him with believing the soul divisible, for which reason the pieces of an eel cut asunder continue to wriggle because there is a bit of soul left in each of them. And to my thinking he allows nothing automatic even in the grown man, but that we place the particles of our daily nutriment every one in its proper station by our own Will: particularly in his section upon the Sphacelus, where he seems to ascribe the spreading of a mortification to the laziness of the mind which withdraws her activity from the sound parts adjacent and so lets the putrid humours continually gather ground upon her. Now I love always to go to the fountain head and should be glad to know from his own mouth which or whether any of us be in the right.

Well, says he, I'll carry you to the conference to humour you, but question whether you will be much the wiser for it. Your desire of recurring always to the spring head is commendable, but I cannot promise you much benefit here: for our spring runs ice rather than water, that one had more need bring a hatchet to cut out a slice than a pitcher to draw with. For as Plato told us just now of a better man, he has no happy facility

facility of expressing himself: besides he is not a very conversible creature, having brought up hither plenty of grumous concretions and fæces of cystic bile which make him sullen, peevish and fractious. You must behave very respectfully, seem to comprehend him whether you do or no, and contrive if you can sometimes to imitate his language without mimicking it; 'twill please and perhaps make him more communicative. He has a large fund of honest industry and indefatigable zeal for the good of his fellow creatures, which will prevail at length over his concretions, discharging them gradually with the help of our needles; for true hearty charity will cure as well as cover a multitude of sins. The Faculty below hold themselves much obliged to him for many usefull improvements he has made in the science. So you must learn not to think meanly of a man that has any valuable talent with a right disposition to use it, because he cannot make a handsome bow nor run ye off an elegant period. Oh! no, says I, the solid always carried the preference in my estimation before the specious. Yet methinks the example you have just now laid before me is a further justification of my aiming to get assistance from the polite arts for lifting up my profound speculations nearer the common

mon surface that more people may be capable and willing to pick them up.

58. But since I presume we have still some length of way to the end of our stage, give me leave to ask who is that antagonist whom he bumps and pommels so furiously in his Shadow-fight, for he never calls him anything but Mr. Author. That, says Locke, you might have known could be none other than Leibnitz by his claiming the first thought of a pre-established harmony. What! says I, that veteran prolemic who battled so long with Dr. Clarke? Indeed he shows himself the better disciplined soldier of the two in the Shadow-fight, and handles his arms much cleverer, at least so far as relates to the stile.

Pray, has not he an adopted family among you? for two of our countrymen, Hartley and Berkley, visibly derive from him, besides the foreigner Mallebranche. How so, says Locke, did they maintain his doctrine of pre-established harmony? I don't say that, replied I, but they broached opinions which might naturally result from it. For he laid down for his foundation that spirits being Monades and matter infinitely divisible, there was no proportion between them and therefore it was impossible they should in any manner affect or operate upon
one

one another. No doubt he overlooked the horrid consequence that must follow from thence, namely, that neither can God himself operate upon us: for though he be a Monas and we are Monades, yet there can be no proportion between that which fills all immensity and that which lies circumscribed within narrower limits than imagination can define. However, upon this foundation he concluded there must be two courses of Providence established, wholly independent on each other, governed by separate laws: one for the motions of matter by a necessary chain of causes and effects, the other for the perceptions of spirit by an unalterable succession of ideas: but both so admirably contrived as in every step of their progress exactly to harmonize and correspond with each other. So that when upon finding myself cold I go to stir the fire, I can do nothing to make it burn, nor does it contribute anything towards warming me; but a convulsion seizes my arm which makes it mechanically catch hold on the poker and fall a poking: in the mean while a correspondent series of ideas introduce one another in my mind; for my coldness ushers in the idea of taking the poker at the very instant when the convulsion seizes me; as the coals burn briskly, though I really see nothing of them, I have

an idea of a great blaze in mine eyes just when the flames begin to mount; and in consequence of this, but without being anywise affected by their heat, comes the idea of feeling warmth.

From thence Hartley seems to have drawn his notion of the mechanical necessity of all human action: but he follows his original only half way, for though utterly rejecting any operation of spirit upon body, yet he allows body to operate upon spirit, and asserts that our ideas are all brought us by the vibrations of a material ether.

Berkley will have it that spirit neither acts nor is acted upon by body, therefore not unreasonably denies the existence of matter as a thing wholly useless. For what need I have an arm by my side or coals in my grate if I have no power to do anything with them nor they of affecting me in any manner; and if they do not bear the least share in exciting those ideas of poking of seeing a blaze and of feeling warmth which follow in succession by laws of their own? Nor is it probable that God, who does nothing in vain, should create a material world to be of no use to his spiritual, for whom he had provided other laws for bringing forth all the good and evil he fore-ordained should fall upon them.

As those two gentlemen were certainly good and pious men, tis much they did not reflect that their doctrines must be utterly subversive of all religion, morality and even common prudence. What encouragement or what room is there to aim at attaining a right tenour of conduct and sentiment or exhort others to the like? since endeavours we can make none, but must wait contentedly for such thoughts, opinions, desires and designs as it shall please God to send us either by the ministry of vibratiuncles or by the pre-established order of succession among ideas.

And the system of the latter does great injury to two of the divine Attributes: for the corn, the fruits, the plants, the variety of provisions for our sustenance, our accommodation and our enjoyment, the wide-extended Ocean, the realm-bounding mountains, the immeasurable expanse of heaven, the numerous host of Suns stationed at immense distances bespangling our night, are striking evidences to us of the power and magnificence of our Creator: which evidences will be utterly lost if the Suns, the heavens, the hills, the seas, the animals, the vegetables, have none other existence or reality than in our own deluded imagination.

Then for Wisdom, the very essence of that consists in the apt disposition of causes for producing -

producing effects; and is displayed by the admirable contrivance apparent throughout the natural and moral world, wherein jarring elements, an endless variety of differently qualified bodies, incompatible interests and discordant passions, co-operate to maintain regularity in nature, society and good order among mankind, bringing forth unerringly their destined events by a thousand successive gradations and through a thousand intricately-winding channels. Whereas there is no wisdom in stringing a succession of ideas, for this depends upon arbitrary Will and pleasure. The idea of a plentiful harvest, had God so pleased, might as well have succeeded the idea of a cricket match as the toils and cares of the husbandman. And the ideas of health, activity and enjoyment might as naturally have flowed from the idea of sawing a block of marble into slabs as from that wonderful structure of bones, muscles, bowels, vessels, fibres, in the human body discoverable by dissections of anatomy. Thus the Maker of this stupendous universe is debased to the character of a fanciful poet or romancer occupied solely in leading imagination along an endless variety of trains which have no truth nor Being elsewhere than in our ideas.

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Nevertheless in dealing among these and such like persons of deep speculation I have observed one particular in confirmation of my own sentiments, that they all in general (for I will not except Stahl, because I do not believe he ever thought of cutting the soul of an eel in pieces) seem to hold that every perceptive Being must be a true individual; and that every compound or divisible substance, such as are all the bodies falling under our senses or knowledge, is not one thing but a collection or aggregate of many.

59. I don't know whether my patron attended to my prattle: tis best for my credit to suppose he would not interrupt me for fear I should not have time to say out all my say: for I had but just vented my last shrewd observation when I found we stood still close by a bag which looked more lumpish and made of coarser stuff than any I had seen. There, says my guide, there is your oracle. Perhaps I may not get you an audience now you are come. He gave it five or six gentle taps and hallooed to it as many times; but nothing ensued. Pray, says I, had not you better talk to it in the sentient language? He don't understand that, says he, though we can understand him plain enough: for he has a wonderfull propensity in thrusting his own notions upon other people, but as great back-

wardness in receiving theirs or even entering into their meaning. Suppose, says I, you should give him a good hunch with your foot. That won't do, says he, our vehicles are so light and the resistance of ether so small I should send him a bow shot from us: and it would be an odd way of asking a favour to kick a man about like a football till he grants it. So he thrust out two brawny arms and gave him a lusty punch on the opposite sides that the force of one might counteract the other. We then heard a grumbling voice mutter out. Who are ye. What d'ye want. Let me alone! D'ye think to foist, or like the Plautine Sofia, fist, your notions upon me? Your skirmishing parties, call them cohorts or cow-hearts, shall never drive my statarianly disciplined battallion from its ground. Why, your infinitely-infinite monades in infinitely-never single bodies, producing upon a thing non-existent a non-existent effect, cannot get the better even of my light armature, my skipping scampering hussars, yea, with Parthian dexterity pugnacious even in flight. Locke whispered me. Now he is dreaming of Leibnitz all this while. And then addressed the shadow-fighting champion in these words. Celeberrimous Doctor, sole master of medical science, we mean no attacks either upon your battallion

or

or light armature: they are too respectable a body. You know my voice, that I am not Mr. Author nor one of his adherents. I have made bold to bring a new adopted son of mine to beg a detachment of your statarian soldiers to escort him into the regions of physiology and pathology. A commendable attempt! says the bag, yea a laudable, not to say, noble ambition! But what need he plague me? Is not my True Theory to be had? He may learn there every thing that is to be learned. He has had recourse to that, says my patron, but being diffident of his own capacity he is not sure of comprehending everything exactly and wishes earnestly to be set right from your own mouth. Has your boy any brains, quoth the bag, yea, is he attentive, not to say, docible, nor yet, tractable? As for brains, replied my patron, it does not become the partiality of a parent to pronounce upon them: but I have always found him very desirous of learning while under my tuition. Well, well, quoth the voice, let him propose his difficulties. But, added my conductor, my son has been so constantly used to sensible objects that he cannot hear what anybody says unless he has a face to look at. Do so much as put out a head to humour him and make his improvement easier. Pish! Phoo! grumbles the bag.

Putredo and Sphacelus take it! What a deal of pother is here to please a young fellow's whims, yea, vagaries, not to say fooleries, nor yet impertinencies! We then beheld a head with a stern hard-featured countenance rise slowly up, like a ghost through the trap door of a stage. Come, says my guide, be quick. Don't waste the Doctor's precious moments.

60. Venerable Sir, says I, son and heir of Esculapius, that I may not stick in the first threshold I would be glad to know whether I rightly comprehend the force of those introductory terms which open the door to all the rest: I mean a mixture, a compound, a machine, an engine or instrument or organ. Prithee, says the professor, none of your fashionable, yea, vulgar, not to say, gossiping, nor yet, finical language. You must learn to use the scientific terms if you would be good for anything, and say mixtion, composition, mechanism, organism, as well in entire systems as in their sundry parts, yea, members, and moreover, the speciallest species of them. I thank you learned Master, says I, for your correction, which shall not be thrown away upon me. Now I apprehend those four things are under-species of one another: so that a particular kind of mixtion is a composition, a particular kind of composition is a mechanism, and some mechanisms
are

are organisms. If I throw two pecks of pease into a bushel measure, that is a mixtion; if I pour in two pecks of oats upon them and shake both well together, that is a composition: when a watchmaker has completed a watch so that it can point the hour and minute and make several automatic movements spontaneously, that is a mechanism; when an artist has finished a fiddle to give all the notes in the gamut but not without a hand to play upon it, this is an organism. The same appellation belongs to a rolling stone, a wheelbarrow, a cork screw, a pencil, a knife, which are fitted for peculiar uses of mankind but will do nothing of themselves without somebody to handle them. Thus our poet said, or should have said, of a pair of scissars, he takes the gift with reverence and extends the little organism on fingers ends. Good boy! good boy! says the venerable, your child may come to something in time. But, continued I, my fear is that I have not yet gotten the true characteristic, yea, criterion, not to say, diagnostic, nor yet, line of separation dijuncting the province of organism from the rest of the mechanism territory, so as to know precisely upon every particular occasion which is which. For though I can easily see that a man's hands and feet and tongue are organisms because they will not

handle nor walk nor speak unless he sets them at work; yet to my apprehension the heart and arteries, bowels and other vessels, seem to fall under the idea of meer mechanisms. Whereas you have taught us that the whole human body, together with all its viscera, yea, chylepoietic digestories, not to say, sanguiferous trunks, nor yet, minutissim glands, and moreover, speciallest species of secretory ducts, and even cellules of the adipose membrane, are so many distinct organisms. I see, says the professor, your son is a little dull of apprehension: but that, you know, he cannot help. Therefore tho' we are confident that everything set forth in our Theory radiates, as the saying is, with its own lustre, yet we shall cast a further blaze upon it by one or two familiar examples in condescension to shallow capacities. Mind me then, child. Suppose you bespeak a clock of artificial and workman like construction with everyway-multiform-exquisitely-mechanical circumstances belonging to it. The artificer brings it home, puts it up properly upon the dimidiated platform of your staircase, and sets it exactly by the equation table: now it is an organism. But if you let it go down, and after winding it up again should, either through oscitancy or want of sufficient skill, set it at hap hazard, so as to
make

make it strike four when it ought to strike one; or lengthen the pendulum, so that it loses ten minutes an hour: then it is nothing but a mechanism. Again, suppose in some remote, yea, hitherto perhaps by human industry unreached regions of the terraqueous globe there should be large tracts of country or islands, which by the spontaneous condition of their soils, their waters, their hills and their vallies, should be beautifully adorned with woods and fields and animals of various kinds; nobody, I think, would contradict that all this proceeds from meer mechanism: and it must appear, I think, with the same evidence that there is nothing in act organical among all these circumstances. Send a colony to one of those lands, who shall build houses, dig cellars, raise provisions for themselves and their domestic animals, plant trees and corn which the ground may nourish and bring up quite to maturity: then it immediately becomes an organism. I am a little suspicious, says Locke, that my boy does not fully comprehend you yet. No? cries the venerable in surprize, He must be a blockhead, yea, a numskull, not to say, a beetle, nor yet, a blunderbuss, if he does not. Oh, yes! says I. The celeberrimus Doctor has made the thing as clear as the Sun. I can easily understand how any tract

of land or water may become an organism. I remember when I was a stripling the vast Pacific Ocean, commonly, yea, vulgarly, not to say, news-paperrically, nor yet, teatabellically, and moreover, among the speciallest species of ale-drinking, burthen-carrying, fish-selling rhetoricians, called, appellated, as the saying is, and annominated, the South-sea, was made an engine, I mean organism, to pick people's pockets and ruin half the nation. The like had been done but the year before in a neighbouring nation with the great river, the river Missisipi. And tis not impossible that a few years hence the three rich Nabobships of Bengal, Bahar and Orixia may be turned to the same laudable purposes.

61. It quickly appeared I had committed murder, his features, which before were hard as oak, became now as hard as rock, and he began to draw in his head with as much speed as his great gravity would permit. But Locke, being a good deal nimbler, clasped him under the chin with two stout plowman's hands crying at the same time. Pray, Mynheer, dear Doctor, celeberrimous Doctor, insignite illustriissim Doctor, Hallensian star culminating in the zenith of brightness. Never mind what a child says. I am sure he meant no harm. Twas only his vanity made him
pretend

pretend to understand you when he really did not. I durst not utter a syllable all this while for fear of making matters worse, but kept drawing myself up with the hand I was holden by till my vehicle touched Locke's expecting he would feel my thoughts. He then let him go, when instantly the head shot in, like a large knife into a new sheath when by pressing with might and main you have just overcome the stiffness at the entrance. We now had only a shapeless bag before us: but we saw the vocal fibres agitate all over, and heard a vehement eager grunting, such as the hogs make when a strange pig comes into the yard.

So we left Mynheer Celeberrimus to compose himself and make peace with his own shadow as well as he could: and being gotten to some distance, Locke owned I was in the right not to wish the conference might be renewed, for I should never have profited by it. So I believed, quoth I, for he is a bar's length more profound than Pythagoras. Pythagoras, returned he, had his reasons for being profound; but this man is profound because he cannot help it. But how came you to be so careless as to disgust him after all the hints I had given you? Why, says I, did not I follow your injunctions to a hair? Truly, says he, scarce to the thickness of a cable.

cable. Instead of appearing to comprehend him, you showed yourself resolved to misapprehend him nor did you observe the charge I gave you to distinguish between imitation and mimicry. There is one caution very needfull for you airy gentlemen to bear in mind, Never hazard giving offence for sake of a joke. Well, says I, this is the second time I have suffered by my indiscretion: tho I have some excuse here, for he so be-block-headed and be-blunderbust me about as was enough to hurry anybody and throw them off their guard.

But since the mischief is past remedy I must rest contentedly under it: unless you will be so kind as to repair the damage by giving me a system of his sentiments. I am sure you can do it accurately, for you told me he could talk currently to you, tho' not with you in the sentient language. But then, says Locke, you must tell me what part of this system you would have: for the medical would be of no use to you, and the physical, most of it, stands nearly connected with the other. That part, says I, relating to the formation of the fœtus. My patron asked what good it would do me to know that. I told him, Perhaps it might furnish me with an argument from analogy in confirmation of a point I have been labouring to maintain, namely, that our conduct

conduct upon earth may naturally have an effect upon our condition afterwards. For if it could be made appear by the labours of an eminent physician and carefull examiner into the secrets of human nature that our terrestrial happiness is affected by our behaviour in the uterine state, a probable inference might be drawn from thence that all the several forms of Being we pass through are by the laws of nature made dependent upon one another and each of them preparatory to the next. Now my curiosity to consult Mynheer Celeberri-mous was first raised by Hartley, from whose hints concerning him I was simple enough to expect he would show me by undeniable arguments drawn from his medical science that our health or distemperature of constitution, our vigour or weakness of body, our quickness or dulness of parts, and even our natural aversion or propensity to particular vices, were owing to the prudent or careless management of ourselves before birth. But alas! how was I disappointed! when instead of clear demonstrations from experience and discoveries of anatomy I was presented with a confused Chaos wherein I could discern nothing distinctly, and even suspected the Celeberri-mous did not always understand himself. I was in hopes too of finding something concerning the animalcules: for tho' their existence

istence seems generally believed among my learned cotemporaries, it is not admitted by everybody. Might I be so bold as to ask what is the real truth upon that article? My patron rebuked me for this last presumption.

Prithee, says he, don't think to palm your notions upon the world below for vehicular truths. I shall not give my sanction to such an attempt, I assure ye. Whatever might tend to the improvement of your religious and moral sentiments I have already told you. All informations that have been sent from above were given with that sole view, and whoever seeks for anything further in them grossly mistakes their meaning. As for matters meerly speculative you must be content with such glimmerings as human sagacity can strike out. Your new acquaintance has made some alterations in his system by his converse among us, which render it a little less perplexed and incoherent: and I believe you had rather I should give it you in this condition than precisely that it stood with him in upon earth. Nevertheless, having store of concretions remaining, as you might perceive just now, he has not quite gotten rid of human prejudices and human errors: so you must still look upon what I shall tell you from him as the opinions of a mortal, not as the knowledge of a vehicle.

62. He had no thought of the animalcules below, but since Leuwenhoek and Boerhave came up has been made a thorough convert to that doctrine. He says the animalcule gets into the Ovum at the broken end of the Calyx, where it finds a tube growing narrower by degrees, into which it pushes with vehemence until being streightened on all sides by the closeness of the passage, it cannot move neither forwards nor backwards nor even bend its little body; nevertheless being all nerve and fibre it exerts itself strenuously in every point of its surface. Those points in the internal surface of the Ovum which are soft and susceptible of its action, adhere to it and receive its impulse, which continually protruding them forwards causes them to grow first into an embryo, then into a foetus, and lastly the full-formed child. But as there are multitudes of fibres capable of extension in different degrees, and they often stick to one another, if the ends of those which have done growing should fasten to the sides of the others it must necessarily stop their direct progress and cause them to double into folds. Thus the heart, which at first was a strait canal, becomes doubled into ventricles and auricles. Thus the six bowels affording a passage to the victuals from our stomachs, are one continued tube esteemed six times the length

length of the man, but folded among one another so as to lie commodiously within the Abdomen. Thus likewise the smaller fibres become convoluted into Plexuses, Ganglions, Glands and winding ducts.

If this extension was not owing to the action of the animalcule, why should it never take place in the Ovum before being impregnated therewith? for that receives continual nourishment from the Ovary wherein it was produced. Nor does the child wholly leave off this exercise upon birth, as appears by the grunting noise it frequently makes, especially after being fed, which the nurses call thriving because they find by experience that it contributes to the growth and nourishment of the babe. And even when arrived to years of maturity we cannot forbear sometimes yawning and stretching, supposed owing to some perspirable matter wanting to be discharged which this effort helps to push forward and throw off. Thus the fœtus does not want for employment, being perpetually occupied from its first union with the Ovum in distending its fibres; which it is led to do by an instinct, that is, by sensations sometimes perhaps painfull occasioning maims, distortions and imperfections, but for the most part pleasurable assisting in the growth of the viscera, limbs and members: for good plight
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of body bespeaks an easy mind, and anxiety is observed to vitiate the juices and corrode the flesh. Boerhave has remarked that pleasure and pain proceed from the same mechanical causes operating only in a different degree: a nerve moderately stretched yields a pleasing titillation, when almost ready to break it gives anguish, and when quite broken ease ensues. In the former case the mind strives to thrust forward the hither part of the nerve to meet the titillation and feel it more sensibly; in the latter to draw it back either for closing the passage or attaining ease by a complete rupture. Thus whenever exerting her activity to extend, she is in a state of pleasure: when to contract or withdraw, in the contrary. And this may account for those sudden amputations of an arm or a foot sometimes happening on frights of the mother: for a violent contraction may snap short the tender fibres just in the place where the uneasiness was felt.

Therefore what Boerhave asserts of the fœtus passing far the greater part of its time in sleep without any ideas, must be understood of such ideas from external objects as engage the notice of men: for ideas may spring from inward feelings while the limbs and outer parts lie motionless as in sleep. But as the sensible nerves grow in length and
become

become gradually connected with remoter parts of the distended Ovum, sensation follows their progress and seems always taken at the very extremity of the nerve conveying it: hence we apprehend ourselves perceiving at our eyes or our ears or our fingers ends, and esteem ourselves present throughout the whole surface of our body; or rather beyond, our imagination renewing that antiquated notion of something going out from the eye quite to the object, so that we account done in our presence whatever is done in our sight. It must not be supposed the fœtus proceeds with skill or forecast or knows the uses of the limbs and vessels it forms; but is directed to exert its activity from time to time at the proper places by sensations of present pleasure and pain excited mechanically by the circulating juices and gross composition surrounding it.

He says further that the animalcules are variously sized and constituted according to the origin whereout they sprung, and so are the Ova; whence it comes that the child takes after both father and mother jointly: but as the same tree bears differently conditioned fruit, so both animalcules and Ova of the same growth are not all exactly alike; and hence it happens that children of the same parents differ widely in their disposition,
make

make and features, Yet there is another cause which encreases the difference, namely, the occurrences befalling the mother during gestation: for the state of her imagination affects the burthen she bears, not immediately by mechanical operation, but by influencing the imagination of the fœtus. This he attempts to prove by many instances, as well from his own experience as the testimony of Boerhave, of very extraordinary effects produced by the frights and longings of women. He owns however that some persons of great knowledge do not admit the reality of those instances, but thinks their bare denial of the cause without accounting any other way for the facts, which are incontestable, not sufficient to shake the authority of the greater numbers who maintain it.

63. Here I begged leave to put in a word of what I had heard among my cotemporaries relating to this affair of the mother's imagination: for that I knew a man eminent in his profession, perhaps the best anatomist in Europe, who treated this as an idle notion, insisting that the supposed marks are mere sports of nature, like the spots and warts often found upon apples: but when any thing of this sort happened the mother hunted about for some fright or longing she could recollect, and by an after-thought assigned that for the

cause. On the other hand I was told by a man-midwife of very great repute in our Metropolis that once upon a delivery wherein nothing appeared amiss to his observation either in the mother or the child, she pressed him earnestly to examine the hands: accordingly when the child was carried into the next room he took the first opportunity to examine the hands and found on each of them a supernumerary finger, which adhering only by a bit of skin, he snipped them off with a pair of scissars and presently healed up the wound with a little salve. It was thought proper in the family that this should be concealed from the mother; so upon her asking him he was forced to tell her he had found the hands such in all respects as might be expected in a healthy vigorous child. She then cried out in a transport of joy that she was extremely glad of it, for that on such a particular day, being in a chariot, a beggar woman had thrust in a pair of hands with six fingers, which had alarmed her greatly and ever since it had run strongly in her head that the child would be born with the like. Now this could not be an after-thought in the mother to account for a phenomenon she never knew of. If I were ever to see the Celeberrimus again I would recommend to get some of his neighbours who go down to earth

earth to bring him a report of the cases cited from very good authorities by Dr. Douglass in his Criterion of miracles, wherein are several accounts of astonishing effects produced upon the bodies of persons in years by a strong impulse of imagination. For if that faculty has so great a power over the dry and stiffened fibres of an adult it may well be presumed to act with much greater force upon the tender filmy flesh of a fœtus. I'll give him your hints, says my patron, which I doubt not he will thank you for : and perhaps they may atone with him for your late rudeness. And possibly he may learn something from Gellius by the sketches observed in the tablet of your memory. I am afraid, says I, they will be very imperfect, for it being some years since I read the book the traces are in great measure worn out. But probably Gellius may be good natured enough, when he hears what we have been talking about, to inspect the sensory of some other person who has the impressions fresher.

But, continued my instructor, with respect to the objections of anatomists our professor says the point does not lie within the compass of their art to decide : for between the Placenta and Uterus there lies a Mucus or thick humour, which Boerhave will agree with him is not properly a humour, but a conge-

ries of exceeding fine vessels, too fine for any instrument of the anatomist to trace out; nevertheless they may suffice to carry on the communication of ideas between the mother and the infant. Yet you must not imagine the very same ideas propagated from one to tother; for when the mother is terrified with threatening words the embryo cannot be supposed to have the sound of them in its unformed ears, much less to understand their dangerous meaning: nor when she longs for a peach, can it be thought to perceive the fine flavour or beautiful bloom that strike her fancy. But the modifications and motions of matter may excite ideas correspondent to those which occasioned them yet without their being similar: and of this you may find examples in common life.

When a man writes a treatise the ideas in his head direct him to the matter and manner of his composition: if he sends it to the press the compositor cannot place his types without ideas, which he takes step by step from the copy before him: yet are his ideas very different from those of the author, who may be presumed continually attentive to the strength of his reasonings, the aptness of his figures and propriety of his language, without much regarding the grammar and spelling which flow spontaneously from his experienced

ced pen; whereas the compositor's mind is wholly occupied with the letters and orthography, he thinks nothing of the argument, nor manner of handling it. Then again the reader pays little regard to letters and syllables, 'tis enough if there be no gross misprint or egregious blunder to draw off his notice, he takes in whole sentences and paragraphs at a glance, and directs his attention to observe the main tenour and disposition of the performance. Nevertheless the idea he receives perhaps may vary greatly from those in which the author wrote: what struck the one as something sublime, humorous or elegant, may seem low, insipid and vulgar to the other; what one thought demonstration, to the other may appear a rope of sand; what was dictated to the one by a spirit of rational piety, may raise in the other an idea of prophaneſs or ſuperſtition. Thus the ideas of all three tho' far from being ſimilar, correſpond and depend upon each other: for had the author had other thoughts he would have written in another manner, the compositor would have ranged his types otherwiſe, and another train of ideas would have been ſuggeſted to the reader.

He is grown ſo zealous an advocate for the animalcles as to inſiſt that they are rational creatures, becauſe their being never found

unless in the cellules producing them, in the Epididymis, the Vas deferens and the Vesicles, altho' the humour they float in is known to diffuse over the whole human body, indicates a choice and discretion that withholds them from entering places unfit for their accommodation. Besides, it stands to reason that the ethereal body should have a fuller use of all its powers the thinner and finer the elementary covering is wherein it lies enveloped: as a man has the fuller use of his arms and fingers in kid gloves and a silk waistcoat than if he put on a great horseman's coat and a pair of heavy gauntlets. And the rationality of man proceeds from there being some hollow cellules in the Ovum which do not adhere to the animalcule: whereas in the brutes and insects the gross elementary body presses every where close upon the little inhabitant within, so that it cannot act in any point except in those alone where the gross covering is yielding and movable by it. Therefore tho' they distinguish and judge, they have such judgements only as their senses from time to time impress upon them: but man possesses a power of acting upon his own thoughts and calling up ideas of reflection without aid of external objects. Yet is this power less than in his original state, for those ethereal strings which are
drawn

drawn out to an immoderate length by the distension of the Ovum in its growth must hinder the operation of the others: just as a man who should have the fingers of one hand thrust into a low waxen ceiling which kept them always stretched at arms length, would not have so full a use of the other arm as if both were at liberty.

64. He has battled strenuously with some who denied there could be much scope for action and enjoyment within so narrow a prison as the animalcules were cooped up in: for, says he, all magnitude is relative to the size of the creatures observing it. Upon earth we used to take for the basis of our admeasurements the breadth of a large man's thumb, which we called an inch: twelve thumbs were supposed the length of his foot: something more than five of those feet made his pace in walking fast: a thousand of his paces made a mile: and by miles or thousand paces we computed the largest tracts of country, the circuit of the globe, the distance of the Sun and planets. Thus our highest computations still bore a reference to the parts of our human body. Now imagine animalcules to take their rise in measuring from the width of their tail, which we may suppose the same to them as a foot was to us: let five of those feet, or better, go to a pace, that is, such

length as they can throw themselves forward by one wriggle of their tail : then reckon by animalcular miles or thousands of such paces, and you will find more of them in the many winding ducts open to their passage than you would have miles to pay for a post-chaise to carry you about all the roads in England. But you would hardly think a man kept in close imprisonment who should have the whole kingdom of England to range in.

He will needs have it that the entrance of a particular one among their number into the Calyx is not matter of chance but settled by certain rules founded upon solid reasons : nor is it claimed as a privilege, but submitted to as a burthen unreluctantly upon a motive of public spirit ; because if the race of men were to fail, the race of animalcules must cease too for want of a proper habitation to subsist in. It has been objected against him that the violent frisking motion with which they are always found to dart to and fro does not give the appearance of a prudent considerate animal. To this he answers that this is not their natural motion, which is more sedate and regular while in their proper places of abode : but they are never seen with the microscope unless in a dying state upon being driven out of their element. Yet are their agitations neither effects of wantonness nor expressions of pain

pain or uneasiness, for death is terrible to man alone: of all other creatures the inferior know not what it is, and the more intelligent know it is nothing more than a passage from one state of existence into another. Therefore tho' the wanton waste and destruction of them be a species of murder, they lie under no such terrors as mortal man upon falling into the murderer's hands: they perceive their material integument beginning to break, and exert all their efforts to rend it asunder the sooner. Have you not observed the little insect producing a gnat dart up and down with sudden jirks and great velocity in the water, till one end being gotten open is thrust up to the surface? when immediately issues forth the winged captive from its imprisonment, in joy, no doubt, and transport, soaring aloft to take possession of its new aerial country. So Psyche enclosed in the animalcule, upon finding the walls of her prison crack, struggles hard to hasten the total rupture, that she may get a compleat deliverance from her immersion in matter, regain her native heavens, and mingle among the host of her congenial spirits.

65. I have now, added my patron, given you as much of his notions as you can want. You are not to take them all for Gospel; but parables are employed in the Gospel, and even popular

popular opinions not discountenanced when they can be turned to useful purposes. Much more the imaginations of learned and close-thinking men may serve, when rightly applied, to enlarge your mind by enuring your imagination to follow more readily the judgments of reason. They may give you a quicker apprehension of an important truth built upon solid grounds, namely, that happiness is not confined to the enjoyments and accommodations of human life. For the arm of the Mighty is not so short nor the treasures of his wisdom so scanty as that he should have but one way to make the existence of his creatures pleasurable. He can give them what measure of gratification he judges proper in the body of a giant, an insect or an animalcule, by intelligence and reason or gross sense and appetite, on earth or under ground, in water air or ether, or naked and unembodied in any material composition whatsoever. As he changes their nature, he changes their situation too and the circumstances of it, adapting each to the other: for various natures require various situations, and what would be wretchedness to one is enjoyment to another. You could not subsist in the waters where the great Leviathan takes his pastime: and the pure air that gives you spirits would prove his certain destruction.

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You would be miserable without society, light and exercise: but the foetus lives satisfied and thrives pent up in a dark and lonesome dungeon. Therefore consult your present nature so far as to provide by what methods you can for its preservation and well-being: but when called to another, where the meats and drinks, the lands and houses, the diversions and pursuits of men, could be of no use to you, yet follow without reluctance: for the same Power, who has furnished you so amply by a thousand wise and wonderfull provisions in one state, will supply you as commodiously with the requisites needfull for your accommodation and enjoyment in another. Trust then stedfastly in him, and fear nothing: for wherever you go you cannot go from under the eye of a beneficent governour and indulgent parent.

My good patron had his particular reasons for summing up with this very grave conclusion: but he did not disclose them, they became apparent presently. For no sooner had he done than we saw ourselves surrounded with a group of vehicles who came up with great joy and alacrity to congratulate me for that they perceived I was just going to be advanced. I could not help being startled, notwithstanding his last seasonable admonition, having brought up some of those apprehensions

prehensions natural to mortals upon an approaching change. I surveyed my outside, but could see no alteration there : neither did I feel any thing unusual within, except some considerable tremours which I knew were owing to my fears. However, in a few minutes my vehicle burst, and I became instantly absorbed into the Mundane soul.

66. As upon a man awaking in the morning out of sleep the dreams and visions of the night vanish away, his senses which had been kept stupefied throw open their windows, his activity that had lain suspended returns, he resumes the command of his limbs, recovers his ideas and understanding, and goes on with the schemes and occupations he had begun the day before : so upon my absorption I found myself, not translated into another species of creatures, but restored to myself again. I had the perfect command of my limbs, and their motions were familiar to me : I had that knowledge and judgement which is the result of experience. My body was immense yet I could manage it without trouble, my understanding extensive yet without confusion or perplexity : for the material Universe was my body, the several systems my limbs, the subtile fluids my circulating juices, and the face of nature my sensory. In that sensory I discovered all science and wisdom

wisdom to direct me in the application of my powers which were vigorous and mighty, extending to every member and fibre of my vast composition. I had no external object to look upon, nor external subject to act upon : yet found an inexhaustible variety to employ my large thoughts and unwearied activity within myself. I rolled the bulky planets in their courses, and held them down to their orbits by my strong attraction : I pressed heavy bodies to the earth, squeezed together the particles of metals in firm cohesion, and darted the beams of light thro' the expanse of innumerable heavens. I beheld the affairs of men, discerned all their springs of action and knew how to set both them and the courses of events so as to guide the wheels of fortune with unerring certainty.

Nor did I find the least inclination to use my power wantonly or disorderly in any single instance ; for wisdom is ever steady to itself and pursues invariably one grand and well concerted design. Good was my constant motive and an exact knowledge of every thing tending to promote it my perpetual direction. I knew my own immortality, nor did I look upon the short excursions into matter as a discontinuance of it. I was beyond expression happy, the regular motions in my great body giving me a more cheerfull flow of spirits
and

and more pleasing sensations than the most vigorous youthfull health; my imagination entertained with a multitude of varying, never satiating objects; my understanding capacious and clear; my judgement sound and piercing; my conduct blameless, wise and satisfactory. Nor could anything fall out to disturb me, for all the parts of my composition lay under my controul and inspection: my circulations were not mechanical but voluntary, and if at any time I had a mind to change my position within my vast body I could fasten to some particle of the circulating juices I had moved which would transport me whithersoever I wanted, yet without losing sight of the place I came from.

67. Yet with all these mighty powers and privileges I had no temptation to pride or vanity, for I knew that in my own individual I was weak and ignorant, unable to stir a mote in the Sun beams or produce a single perception from my own fund: but all my knowledge was brought me by communication, and my operations performed by the joint concurrence of innumerable hosts of substances of the same nature with myself surrounding me. For there being a general participation of ideas throughout the whole community, we had all the same apprehension, the same discernment of things, the same aims and purposes :

purposes : so there was no variation of sentiment nor discordance of desire among us. The thoughts of all were the thoughts of every one, and the actions of the whole the acts of each particular : for each was consenting to whatever was done by the others, and no sooner wished to have a thing done than he saw it instantly performed. As we had but one mind and one Will, everything happened according to that Will ; for pervading and being mingled with the corpuscles of matter throughout the universe, we actuated the vast mass, each contributing his share, which tho' singly small, yet when united with the rest, sufficed for every work how stupendous soever that was requisite. We were sensible that our strength lay in our unanimity, and in promoting the general good we promoted our own, which made us apply our endeavours with alacrity and delight. We took pleasure in communicating our pleasures, and transmitting our lights as fast as we received them : by which means we had each of us a full display of nature, and by reflection therein, of the Author of nature.

For tho' we could move and range the particles of matter as we pleased, we were sensible that we did not create them, but they owed their existence, their solidity, their mobility and other primary qualities to a higher Power.

Power. We perceived likewise that sensation was the ground-work of our knowledge, that sensation proceeded originally from matter, that if matter should be withdrawn or lose its quality of affecting us with perceptions, or our mutual communication cut off by removing us out of contiguity with one another, we should utterly lose our perception and power of action. This convinced us that we ourselves, altho' a nation of kings governing the universe with absolute sway, were subordinate and dependent. We considered that tho' our present views and judgements arose from the position wherein we had placed the several bodies of the universe large and minute, yet were we moved so to place them by contemplation of some former position : thus position followed position, but the whole must have had some beginning, which we could not give it because there must have been some prior order to serve for our motive and direction before we could begin to act. We saw further that our own existence could not be necessary, we being many ; because what was necessary in one place must be so every where, and consequently One, not in similitude and communion only, as we were, but numerically and individually One. Therefore tho' we were conscious of our community having subsisted

subsisted from all eternity, nevertheless it must have been produced from eternity by a prior Cause, prior in order and efficacy if not in time.

68. Thus the consideration of our own nature together with the nature and disposition of bodies throughout the universe led us to the knowledge of God, whose work we were both in body and soul. We found ourselves subjected to laws we did not make, to migrations into matter wherein parts of our substance lay enveloped as in a shell, cut off from all communication with the rest. As we had both a retrospect and prospect of eternity we regarded the longest of those migrations but as a moment, no more than the smart a man feels on plucking out a hair from his face, therefore submitted to them readily in our several turns; nevertheless we submitted out of necessity, not out of choice. We observed the condition of our substances when immersed in matter, their actions and events befalling them, and discerned uses therein to ourselves unthought of by them. We perceived a small mixture of evil among their good; we would gladly have prevented it but could not without greater mischief to ourselves, for it was made necessary to our well-being. We sometimes upon rare and extraordinary occasions discovered motions

we did not produce, events we did not bring to pass; which convinced us of an interposition to restrain the growth of evil and to rescue those immersed substances to whom the courses of nature had rendered it perpetual. These observations displayed to us the divine Attributes, we saw them consistent and aiding each other with a clearer and fuller view than mortal eye can reach or mortal heart conceive: we beheld Glories ineffable which it is not lawfull, or rather not possible to utter; nevertheless there were greater Glories behind which no created intelligence can penetrate.

69. The contemplation of these Attributes, which we saw were parts only of the Divine Essence, inspired us with transcendent admiration, an ardent love and filial reverence towards our Almighty Father, who was our continual dependence and support, the fountain of our immense powers and unspeakable happiness; and prompted us to employ our eternity in returns of incessant adoration. But our adoration did not exert itself in hymns or empty praises or verbal thanksgivings: we discerned his Will written in legible characters upon the face of his creation, and applied ourselves industriously to fulfill it. The courses of nature carried on by our agency were our hymns, the government

ment of matter administred by our hands was our praises, and a ready obedience to his commands was our morning and evening sacrifice. We knew that in all our functions we were only his ministers delegated and empowered for that purpose : but it was our joy and our glory to be employed as his ministers in executing his works. For they were not arbitrary commands nor exertions of despotie authority : he wanted not our services for his own use, but gave us our tasks in mercy and loving kindness to be a blessing to his creatures ; so that in working for him we worked for ourselves and for one another. We caused our inferiour ministers the heavenly bodies and elements to pay the same active adoration. By our energy we stationed the golden Suns, and strengthened them to hold their several Vortices in concord. The silver Planets compleated the harmony by their various aspects, their change of seasons, and vicissitudes of light and darkness. One day told another, and one night certified another : their sound went forth to the several earths, their voice was heard among the innumerable hosts of heaven. Gravitation and cohesion whispered their share of praise to the attentive ear, the subtile fluids of air and ether joined in the chorus : and the whole creation was one incessant Hallelujah.

Nor did we forget those of our fellows imprisoned within the walls of matter, but provided for them all the accommodations and enjoyments permitted by our common Master. The dispensations of his Providence were conveyed to them thro' our means by the laws of nature which we executed and disposal of second causes which we put in act to bring forth the destined events. With our plastic virtue we worked upon the multitude of habitable globes rolling round their appointed centres thro' the fields of ether : we cloathed their surfaces with the green herb, the flowry shrub and tree yielding fruit ; caused them to produce fossils and minerals below, dews and vapours and benign influences above. We wove the little fibres of vegetables in curious textures, sorted them into a thousand various species and fitted them for a thousand different uses. We interlaced the more curious vessels of animals in many intricate mazes among one another, hollowing them into tubes respectively filled with their peculiar juices, that partly they might perform regular mechanical motions of their own, and partly serve as convenient instruments for the spiritual agent within them. We guided the sensitive tribes by instinct, directing them unerringly to the necessary means of their preservation and encrease, and to answer the purposes

purposes they were designed for with regard to other creatures. The upper species we governed by wants and appetites and passions together with some glimmerings of reason flashing at uncertain intervals. He had his free choice to conduct him in every action, but we knew how by the springs of inclination and opinion to draw his choice upon what particular point we pleased. He acted mostly upon short aims and private views yet we contrived that in so doing he should work himself out a remote benefit he thought nothing of and co-operate to the general good. Even his vices and foibles were not useless under our management: ambition, avarice, luxury, vanity, shame, fear, lust, laziness, petulance, fraud, resentment, envy, had their tasks assigned them: evil became productive of good, and the wicked was made for the day of the Lord: folly and wantonness had their several lines allotted them to fill up in the glorious all-perfect plan given us by infinite Wisdom. The proper station was marked out to every creature from whence it could not be spared without detriment to the whole: they all answered their destined ends without knowing what those ends were or having any desire of attaining them. For as the strings of an instrument perform their parts in the tune,

yet without any knowledge or perception of the notes they give : so the sublunary agents bore their several parts in the general harmony, and contributed to carry on that order of succession among events of which they had no thought or conception.

Thus by directions issued from above and our faithful ministry thereof it was brought to pass that all things, animate and inanimate, co-operated in displaying the wisdom and goodness of that Power which first ordained their motions. The serpentine rivers and unfathomed oceans, fire and hail, snow and vapours, wind and storm fulfilling the tasks imposed on them, mountains and all hills, fruitfull trees and all cedars, beasts and all cattle, worms and feathered fowls, kings of the earth and all people, princes and all judges of the world, young men and maidens, old men and children, all united in the universal song to the Glory and praises of their beneficent Creator.

And upon some extraordinary command received enow of us were found ready at hand to throw the particles of matter into various forms and appearances for producing any supernatural effect. But whether we act ordinarily or extraordinarily we do both invariably according to the general plan assigned or occasional decree issued : wherefore let
not

not mortals address their prayers to us, for we have no discretionary power nor shall any entreaties prevail upon us to depart a tittle from our orders. Neither were entreaties needfull to make us fly to their relief whenever found allowable, for we bore them no grudging or envy, we had no vanity nor fondness for superiority and power, nor contempt of them in their degraded state: but sympathized with their distresses and weaknesses, as with congenial spirits, children of the same Father, fallen from their original perfection, and laboured incessantly by all means permitted us to raise them from their debasement to rank upon a level with ourselves in equal participation of all the powers, privileges and unbounded enjoyments wherewith we were blessed. We watched over nations and empires without neglecting the affairs of private persons: for being diffused throughout all corners of the universe, some of us were ready every where to attend the minutest offices and having one understanding and design in common among us we knew how to adjust the actions of single men to the interests of communities. We paid due regard to matters of importance, nor did we overlook the meereft trifles; for nothing was trifle to us because our capacities were so large that nothing took off our attention from other duties.

duties. Therefore we did not suffer a sparrow to fall to the ground, nor the hairs of a man's head to diminish in number, without the Will of Heaven.

70. With this unceasing attention to the minutest objects it may be concluded we did not overlook Gellius as he sat close to his task in my human sensory : he could not receive intelligence of what passed with me now from the vehicular people, so it was necessary we should convey it to him ourselves. We wrought upon his imagination by our secret energy, casting his mental organs into modifications exhibiting the ideas to be set down, which we excited successively in their order, not giving him a view of whole sentences together : so that he worked like a man in a trance, or one walking in his sleep, or like the Pythian priestess under inspiration of the oracle : he wrote by impulse things he did not understand, and wondered at the words he wrote. It was now judged expedient that I should return to my vehicle, but before my return we thought proper to send an illusion upon Gellius of events that had not happened : he wrote according to what we dictated, and the tenour of the illusion he wrote down ran as follows.

71. We gathered together certain particles of matter and disposed them into two forms, the

the one human and the other angelical; a sufficient number of us undertook the management of the latter, and I was enclosed within the former: so I became a man with human limbs and senses, with the understanding and thoughts of a grown man who had spent his life in study and contemplation. And there stood before me an Angel, his countenance was mild and lively, his raiment white and shining, he had spangled wings growing from his shoulders, his sides and his legs. And he said, O Man, come along with me: I will teach thee what to think of Glories thou canst not comprehend, and make thee more sensible of the infinite distance between the creature and the Creator. So saying he took me up and carried me to the utmost bounds of the universe. And he said, Try now if thou canst create a new world beyond this. And I said, Far be it from me to attempt encroaching upon the Divine prerogative: thou knowest I am poor and weak, unable to act without corporeal instruments, and the little power I have is given me. And he said, I know thy weakness, that the power is not thine, nor do I expect that thou shouldst operate: but I am commissioned for thine instruction. Know then that creative power awaits thy direction for a trial of what thou canst perform by it.

Alas!

Alas ! said I, I know not where to begin nor how to proceed.

And he said, Stretch forth thy right arm : thrust it strait from thy side. And I assayed but could not thrust it out : not that I found any thing resist me, but when my arm came to the utmost verge of the universe it seemed as if I had lost the use of it, so that I could not move it further. And I asked the Angel, Wherefore cannot I move mine arm this way ? I can thrust it above or below, before or behind me, but I cannot stretch it out from my side. And he said, Because there is no space to receive it. And I said, Since it hath so pleased the creative Power, and this for mine instruction, May there be space. And he said, Put forth thine arm again. And I put it forth with ease strait from my side, as I could have done any other way.

And he said, Wave now thy fingers to and fro, moving them in order one after another. Accordingly I endeavoured to do as I was bidden, but could not perceive whether my fingers moved or not, for I had the same feel all along as at the first instant when I stretched out mine arm : wherefore I asked, Why cannot I perceive whether my fingers move or no ? And he answered, Because there is no time, neither without time can there be a succession of ideas or motions. Then I said,
May

May Time begin her course. And presently I felt my fingers move to and fro in the manner I had intended to move them.

Then said the Angel, Now will Space continue and Time run on her course for ever, until the same Power which gave them birth shall interpose to destroy them. What purposest thou next? And I said, Is it meet that Time and Space should be useless? Should there not be creatures endowed with perception and activity to solace themselves in the habitation provided for them, and also bodies to serve for instruments of their action and objects of their perception? Proceed then, said the Angel, to furnish and people this new world. But I said, O Messenger of Heaven, thou knowest there requireth wisdom as well as power to do this great thing: I understand not what number of creatures this space might contain, nor the proportion of matter requisite for their uses, neither how to assort it into elements and marshal the particles thereof in their proper order.

On a sudden I found myself illumined with more than mortal intelligence; tho' there was yet no light I could distinguish every corner of the new created space, comprehending the whole at one view. I knew precisely what quantity of matter was requisite, what places to assign the particles, and
how

how to give each the proper motion and direction to exhibit a plan to the percipient creatures directing them to carry on the order of succession once begun. But the vastness of mine intelligence perplexed me: for mine aim was none other than to communicate happiness to the perceptive creatures who should be created, but was utterly at a loss in what manner to execute my intention. I saw the creatures could not be made equal in happiness to their Creator, yet how far they should fall short of it or what limitations to set them I had no measure to ascertain: neither could I find a rule to determine whether their happiness was to continue always equal in degree, or to vary and receive interruption at stated intervals. And if this obstacle were removed, still I saw there was an infinite variety of ways by which the same portion of blessing might be conveyed to them: it might be dispensed continually with no trouble or perplexity to the creative power by an immediate operation without the intervention of second causes, in which case they would want only the faculty of perceptivity but have no use for that of activity: or they might be endowed with powers of affecting one another: or if matter were employed, there were a thousand various primary properties with which it might be invested,

vested, and a thousand different orders of succession in which it might move, all equally answering the same purpose. But I could find no preference nor make election among them: for to do this was a pure act which I was incapable of exerting, or of forming a choice without some pre-existent motive to incline me. I could not guide myself by the nature of things, for where there were no things in Being there could be no nature of them.

Then said the Angel, Take that scheme of material nature which thou knowest established in the present universe. As I had all knowledge lent me, I comprehended the whole plan of Providence, all the laws of nature and mazes of fortune, the qualities of substances, their relations and mutual dependencies; and began to attempt a plan similar to that of the old world. So I said, May there be such and so many bodies, so and so placed, with such impulses in particular lines of direction among them; according to the architypal idea in my mind. And it was so. And I looked forth upon the works that were made, and behold they were not good. For I perceived that the bodies continually colliding, the motion imparted to them would in time be exhausted

hausted and the whole reduced to an inactive lump.

Then the Angel said, Why dost not thou provide active creatures to repair the decays of motion from time to time by their energy? But I answered, Tho' wisdom and knowledge be given me these are not sufficient for the purpose, for I foresee that if good only be allotted to the creatures they will want a spur to their activity and become careless: but wisdom instructs me not what proportion of evil to intermingle, nor what quarters to assign it; yet goodness forbids there should be any more dispersed than absolutely necessary.

I had then revealed to me the exact quantity of evil indispensable, the several forms of Being and stages of life, to be passed thro, which of them were to be exempt from evil, which wholly overwhelmed with it, and which to contain a mixture of it with good; and that moral evil was to be made the road to natural. Nevertheless I could not proceed: for tho' goodness was satisfied by the small quantity of evil sprinkled among the good throughout the whole, and equity was satisfied because the creatures taking their turn in rotation thro' the forms of Being would receive their exact share both of the good and of the evil, yet wisdom

had

had no sufficient materials to begin upon. For it was not enough there were stations provided to receive such a number of percipient creatures, but an allotment must be made of each person to his particular station: among the rational creatures there were mechanics and soldiers and scholars, but who was to be the mechanic the soldier or the scholar? Here was no proceeding in the gross a distribution and choice of persons for stations was necessary, yet was there no diversity of objects to determine the judgement in making the choice: for there was neither merit or demerit in non-entities, nor difference of qualities rendering them fitter for one station rather than another. Neither could I begin with the next that came to hand, for there was neither proximity nor distance among Nothings; they were all equally near and equally ready to be produced into Being in this place or that by creative Power. Thus I remained at a full stand, and while I stayed the half-formed world was wiped away, mine illuminations were taken from me and I was reduced again to mine ordinary narrow understanding, that of a common man.

Then spake the Angel unto me in a loud and majestic tone which sunk deep into mine ears. Hear, O Man, and remember.

This

This is the lesson thou art to learn from all that has passed in thy sight. Thou couldest not create a world even tho' thou hadst almighty power and infinite wisdom to assist thee: for power and wisdom do not suffice for the work of creation. Power performs nothing without wisdom to direct it, nor does wisdom direct without goodness to move it: goodness may permit, but will not produce evil, and wisdom is not herself without pre-existent ideas to contemplate. Yet was there nothing prior, nothing external to God, which might exhibit ideas, but they were suggested by his own pure act precedent to themselves and to the wisdom they generated. Thou beholdest the works of nature and readeest therein characters of power, wisdom and goodness greater than imagination can fully comprehend: but know, there are other Attributes whereof thou canst not imagine even a glimpse, yet must acknowledge there are such because thou seest effects which could not be worked by those whereof thou hast any imagination. The necessity of evil compelleth not the Lord to admit it, for necessity bindeth him not, but his decrees make necessity. He alone can act where no motives are, and choose between things indifferent: he thereby openeth the sources whence wisdom floweth and beginneth the order

order of succession which she carrieth on: he establisheth the nature of things to be an unalterable rule for his own proceedings and determineth what shall be absolutely impossible, setting bounds as it were to his own Omnipotence.

The Angel having said this took me up in his arms and carried me back to my vehicle: he opened a cleft in my head, which having applied against the rent in the vehicle, he injected me thereinto and closed up the rent; so that the bag became entire as before disruption.

72. Immediately I thrust out my head, and opening my eyes saw my patron Locke with the rest of the vehicles standing round me in amazement: for though they had suspected I should return because they saw my vehicle did not begin to unravel like a torn stocking, as it seems was usual upon disruptions, yet extraordinary events are apt to surprize even when expected. They were very curious and importunate with me to relate the particulars of all I had seen and give them an account of the country they hoped in due time to inhabit themselves. Indeed, says I, Gentlemen, I don't know what you mean. I relate particulars! All I know is that you told me just now I was going to

be advanced, and I thought I felt my vehicle tear afunder, but to be sure it was only fancy, for I find myself sound and whole now. I believe I may have been in a fainting fit for a moment. A moment! said they, why you have been gone from us a full week of our time, and must have seen a great deal in that space. Why wont you communicate? had you any injunctions to secrecy? I vowed and protested upon the honest word of a Search that I had nothing to tell them, and that if I had been gone so long as they talked of I remembered not a tittle of what had passed in that interval. But they would not believe me, and some said they would get it out whether I would or no by the sentient language: so I was in great danger of having a rape committed upon my imagination, if Locke had not interposed. Good friends, says he, you will not get anything of him by violence: I know my cousin better than you do: he has such an abundance of odd thoughts, and jumbles them so together in motly mixtures of serious and trifling, abstruse and familiar, earnest and jest, that you will not discern anything he knows or thinks of if he has not a mind to let you. But I know he will be sincere and open with me. Come, Ned, make a flat side. I did
so,

so, and after a short application of his vehicle thereto he assured them that I had really no information to give them. Besides, says he, consider he went from hence a naked spirit without any corporeal organs or tablet of memory to retain the traces of what he might see during his absence. Locke's authority satisfying the company that there was nothing to be learned from me they dispersed about upon their several occasions and left us alone.

73. When they were gone I observed to Locke that there seemed to be a variety of brogues among them: some spoke in a kind of guttural pronunciation, others as if they had been singing. Can it be, says I, that the Americans and Chinese find their way hither? Can it be, says he, that you are so narrow minded as to doubt of it? Has not the story of Cornelius the centurion convinced you that whoever fears God in any nation finds favour in his sight? He gives to every man the lights necessary for discovering to him the duties he requires at his hands, but men make their own fortunes by the manner in which they use them. There are even of our line of the Searches to be found among the uninstructed and the savage. Those who come with fewer improvements

find no inconvenience in the want of them, for everything lies here in common : we look upon our talents as deposited with us for the public service and that our neighbours have an equal property in them with ourselves, therefore such as have them do not endeavour to enslave or overreach such as have them not, but employ them to procure their advantages and enjoyments equally with their own.

But it is time you should think of returning to your body again : the day has appeared some time upon your hemisphere, and if you should stay beyond your usual hour of rising it will put your family in an uproar ; they will think you defunct in earnest, and finding your vital motions continue but no signs of sensation they will send for Doctors and Surgeons to wrap you in blisters and scarify you all over. But, says I, mayn't your clocks go too fast ? Couldn't we take a little turn first somewhere or other to see more of the country ? What, says he, then you don't care to leave it ? But we do not go by clocks : I see the earth yonder, tho' you cannot, posting away before us ; the verge of night is already gotten beyond the British Islands. Well, says I, since it must be so, here is my arm : but I go half reluctantly,

tantly, for I like this place so well I could be glad to live here always; and yet methinks I should want to see my girls again. So he took hold of my arm. But, says he, you shall take a sip of Ambrosia first to fortify you for the journey, for we shall find damps and foggy vapours when we come down into the atmosphere.

He led me directly to the ambrosial streams where having drank my fill we pushed forward to overtake the terraqueous globe, which we did with as much ease as a waggoner, having stopped at an alehouse door to wet his whistle, runs after his creeping team. We took a little compass to avoid lengthening our way thro' the atmosphere by passing it asslant: this obliged us to cross a part of the shadowy cone of night. In one place of this dark region I heard most dismal howlings, shrieks and clamours of all grating kinds. Pray, says I, what makes those hideous noises? It seems as if a thousand people were cutting one another's throats. Says he, tis a parcel of the unhappy vehicles vexing and plaguing one another. Oh! says I, for heaven's sake let us keep out of their way. If I should meet with another Borgia among them what would become of me? So I will, says he, not upon our own account, for I

not scruple pushing thro' the midst of them for any hurt they could do us, but the sight of our people encreases their torment stirring up their envy, remorse and despair. So out of compassion to them we went round just enough to escape their observation and very soon emerged into light. When we came into the zenith of the great Metropolis of commerce we shot directly downwards like a falling star, Locke making the nucleus and myself the trail.

74. In our passage through the atmosphere I diverted myself with observing the variety of different particles, metallic, stony, vitreous, ligneous, vegetable, aqueous and sulphureous, dancing in nimble mazes, never touching but thrusting one another away, as the contrary pole of a loadstone does the magnetic needle. The aqueous, upon the action of heat within them being withdrawn, were overcome by the stronger repulsion of the rest, which forced them together into contact and gathered them into drops. In this state they turned the course of the rays falling upon them obliquely and broke the bars into their constituent balls, which proceeding then with different velocities, if they chanced to overtake one another, they

they adhered by their flat sides and formed compleat bars again.

Being now arrived at the top of mine own house the rays we had skated upon would not attend us further, but it pleased me to see how nimbly we glided through the pores of the tiles and timbers, like a snake along the twigs of a hedge. My conductor stopping asked me what I saw before me. I see, says I, a prodigious torrent rushing directly upwards in circling eddies with a tremulous motion. That, says he, is the flame of a candle your maid has left upon the stairs while she is gone down to fetch some chips for lighting your study fire. Come, shall we go into it? I can show you something very curious in the inside. You don't say so! cries I. We shall be burnt up in an instant, like a spider thrown into the kitchen fire. He laughed at my simplicity. No, no, says he, we are not afraid of material fire, if we can keep from inward burnings. The distempered vehicles indeed being debilitated in their limbs, cannot manage them properly: so the agitations of fire beat them about incessantly, giving them as violent smart by outward pulsion as they do the human flesh by stretching the parts of it from within. Then laying hold of me he gave a strong jump which threw us upon the

middle of the snuff. But we could not stand still there a moment, for there was such a commotion of the particles moving in all curvatures about us that we were forced to shift our quarters every instant : but my conductor managed so dextrously by pulling or pushing me to the right or the left that he kept me always in the interstices between them, so that none ever struck directly against me, and tho' I felt them continually brush my sides I did not receive the least hurt from them. I observed the corpuscles of light did not touch the substance of the tallow or the cotton but by their attraction detached particles from them ; upon which the corpuscles and particles rolled round one another as their centres, until being drawn off by the attraction of other centres whereto they chanced to approach nearer, they moved in another circle, and so danced in a kind of figures of eight : but those on the outside, being thrown beyond the attraction of any centre, flew off by their tangential motion in a right line and contributed to form the flame. Look ye here, says Locke, what pretty country-dancings and hayings your five million of million of corpuscles make ! You see a grain of tallow can do as much as a grain of wax : but I suppose you choose the latter

latter as the genteeler and cleaner of the two.

75. He then carried me down stairs and set me upon the floor. Now, says he, you may use your legs: here is ground to tread upon. I was overjoyed to find my feet again. I scampered to and fro like a wild colt upon a common, shifting my little legs faster than a fly upon a table. I found the boards and nails of the floor and other bodies I met with were not solid, but rather a net-work consisting of very large meshes: neither were the threads between them any other than a finer network composed of smaller meshes resembling the shrouds of a ship: I run up and down the wainscot by help of these shrouds without difficulty or danger of falling. There happened a chimney sweeper to pass along the street whose shrill cries made the strings of the networks vibrate considerably, but in different directions according to the difference of their position: I found that by means of these vibrations I could jump above twenty times my own height or throw myself a considerable way from a side of the stiles to some protuberance I could catch hold of in the pannel, like a squirrel vaulting from tree to tree; for after one or two trials I learned to form my fingers into claws with which

which I could hang to any thing like a cat. Once indeed attempting a swinging leap from the wainscot to the floor where the boards being decayed with too frequent washing were more porous than ordinary, I did not take my distance exactly, but falling in the middle of one of those wide meshes, might have slipped quite thro' to the chamber below, if there had not chanced to lie a hair across the lowermost mesh of all: this having caught hold of, with a good stout spring I got my feet upon it and presently ran up the side of the pore to my conductor again. I bragged to him how nice this vibration-exercise was for teaching me to walk upon moving ground by taking a certain impulse and direction therefrom, whereby I should learn the sooner to skate upon the solar and stellar rays whenever I returned to ether. He smiled and, Come, says he, enough of these gambols. Let us proceed to your chamber.

We did not go thro' the key hole, as they say spirits usually do, for that would have been out of the way, but thro' the chink under the door: yet I held up my head as erect and found as good room over it as a goose in going thro' a barn. I followed my guide to the right hand or the left, up hill

or

or down, as he led me, still skipping from mesh to mesh with higher bounds than needfull while he walked soberly along the strings.

We clomb a high pinnacle that appeared like the Pike of Teneriffe tapering up to the top, where was a spacious flat big enough for five hundred of us to have danced a Lancashire hornpipe. What are we got upon now? says I. The point of a pin, says he, sticking out of your pillow. But look up over your head and all about ye. I used to think, quoth I, the world was round: but this is a square world. Tis your bed, says he; the curtains drawn round except one place at the feet. Good lack! says I, what fools are mankind to terrify themselves with notions of Ghosts throwing open their curtains and staring at them with fawcer eyes! A million of us could not stir one of those heavy textures nor reflect corpuscles of light enow to make the apparition of a flea. But what is that huge mountain over against us, with a monstrous gaping chasm on one side and a great ridge turned this way, from whence issue black streams of fuliginous vapour? That, says he, is your head, mouth and nose. Surprising! says I, Have I lain so many years, like another Enceladus, under

der that smoking Etna ! How could I escape being suffocated with that load of filth upon my lungs ?

Hark ! says he, I hear the cocks crow in the stable yard, which is a signal for spirits to depart. So we descended the pinnacle, ran along the pillow, and he conducted me thro' one of the pores in my head, having first made me cast myself into the form of one of Lewenhoeck's animalcules. I had much ado to wriggle along for it was all sticky and miry, like a Suffex road, with the insensible perspiration which in sleep is more copious. When we arrived at the anteriopur ventricles he took a hearty leave, wished me a happy return to the vehicular country again, and bid me take my station. I hung back, and with a lamentable groan, Must I, says I, must I lie imprisoned again in that loathsome dungeon ? Prithee ! says he, no words. Reverence the Oath, for it is the Oath of Jove. Be ready upon call either to enter the body or quit the body. In matters put within thine own power, use thy judgement and discretion : but when thou seest whither the laws of nature or dispensations of Providence point, revere, resign and obey. He then beckoned to Gellius, who leaving off writing,

writing, I know nothing of what passed afterwards.

76. It was now broad day light when Somnus, taking off his poppy garland from my temples, fled away, but with him fled not the visions of the night; for the faithfull Gellius had engraven them in strong characters upon the tablet of my memory. I started up full of the wonders I had seen: I turned eagerly to look for the pin, which I found sticking with the point upwards about six inches from my ear. Is this the summit, says I, where Locke and I found so much room to expatiate? And the sides are all smooth and polished. Where are the shrowds by which we run up and down so easily? I then threw myself upon my back, and was astonished to see the bed teaster so near me which I beheld just before like the spacious canopy of heaven stretched over me at an immense distance. I tried to get a little nap for composing my spirits, but could not. So I got up, and after breakfast finding my head too confused for application of any kind that morning I sauntered it away at Auctions, Coffee-houses, and the like. I could not help every now and then talking to myself, muttering out some mysterious words, such as Euridice, vehicles, Cesar Borgia,

Borgia, riding upon rays, and complained of my chocolate for not being so good as Ambrosia: till I perceived people began to look strange upon me and suspected that, as the French Embassador said of Monsieur D'Eon, I had a little alienation of the organs. This made me more circumspect and carefull to bring myself down to sublunary affairs to save the credit of my intellects; for had I run Opera-mad or Assembly-mad or Methodist-mad or Election-mad I might have found companions enow to keep me in countenance, but such a peculiar species of insanity as Vehicle-madness must have been pointed at by every body; so I strove hard against the impulse and with a little practice came to think and talk again like other folks.

I then proceeded with diligence to reduce into writing the records engraven by Gellius upon my sensory, and think I have done it very exactly not omitting the minutest circumstance that could be discerned clearly; so if there be any thing in them not consonant to the truth of facts it is his fault for misleading me. It vexed me that I could not recover his interlineations for by the imperfect notion I have of them I imagine they tend to harmonize Reason with Religion, and to show that objects rightly placed either
in

in the light of Nature or of the Gospel will appear the same in substance and quality, varying only by a difference of colours suited respectively to the different optics of the man of speculation or the man of business. I thought it very obliging in my kind patron to lead me thro' a variety of entertaining as well as instructive scenes: no doubt he had the latter principally in view, but interspersed the former to make the others the more palatable to my compatriots, who it must be owned are too squeamish in their taste and fonder of the toothsome than the wholesome. I hope they will not frustrate his good intentions by doing like the children when one sweetens a pill for them, who suck off the sugar and spit out the medicine.

THE END OF PART II. VOL. II.